

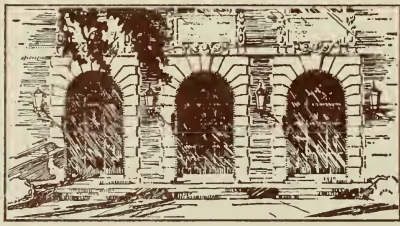
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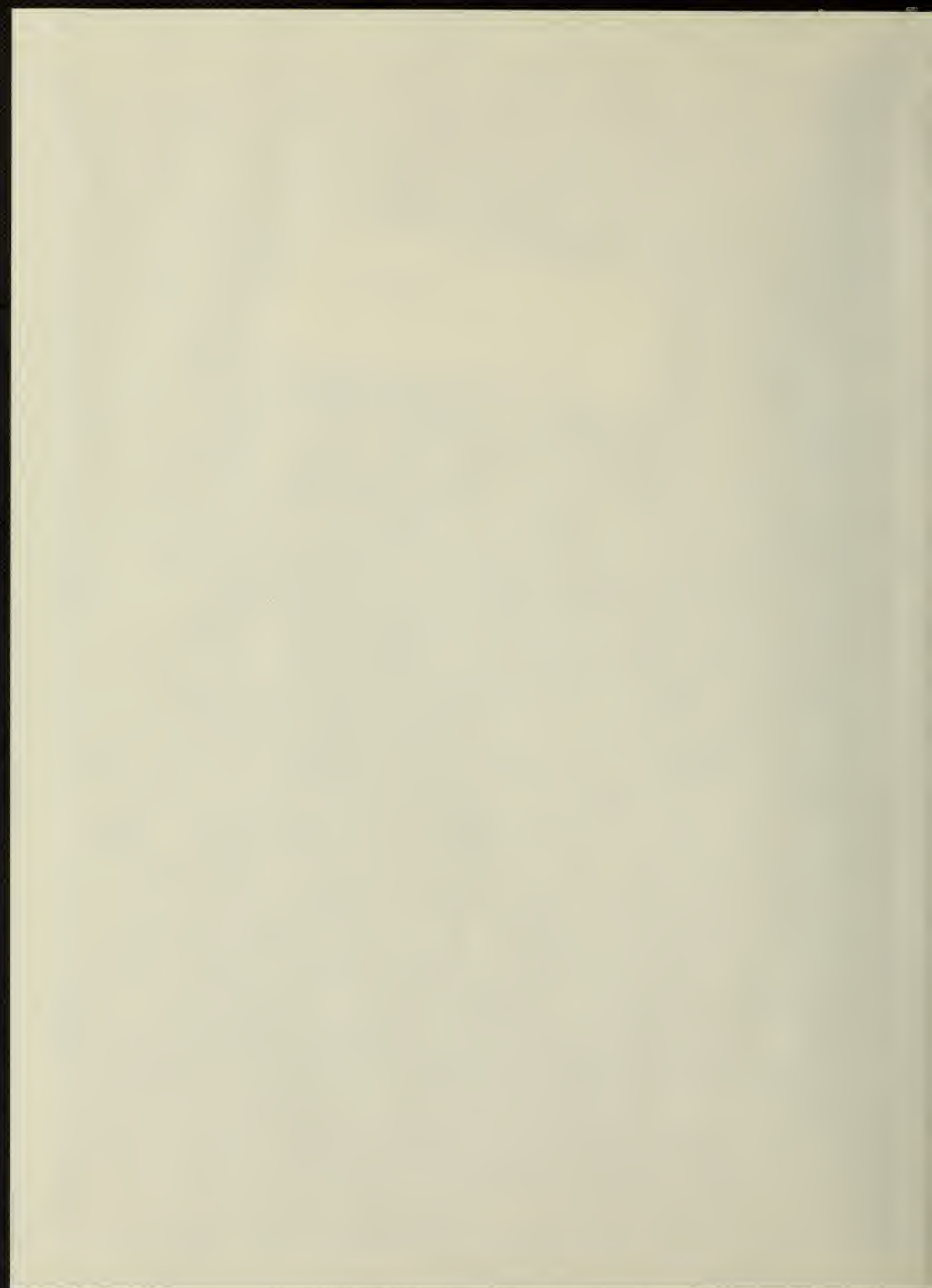
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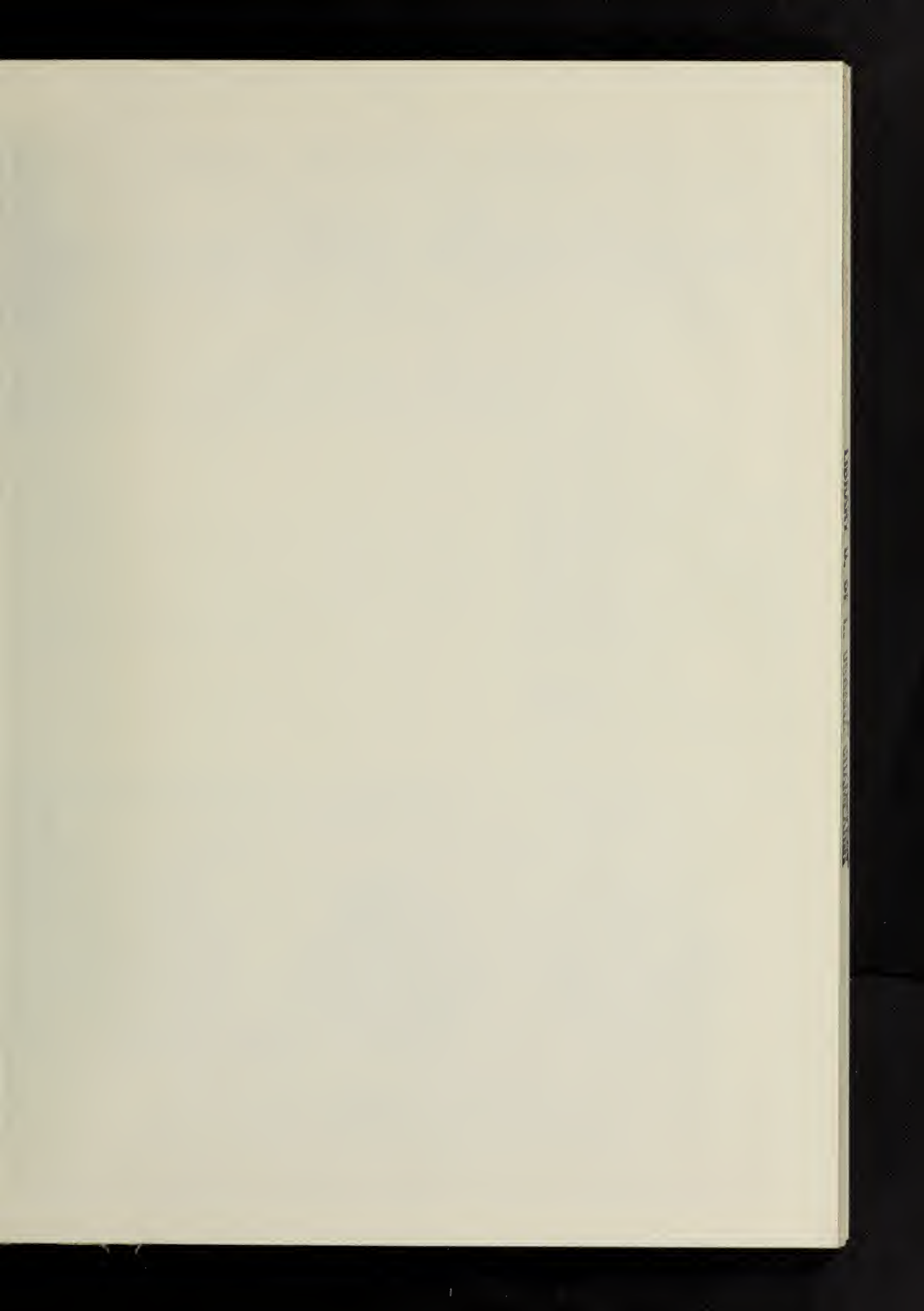
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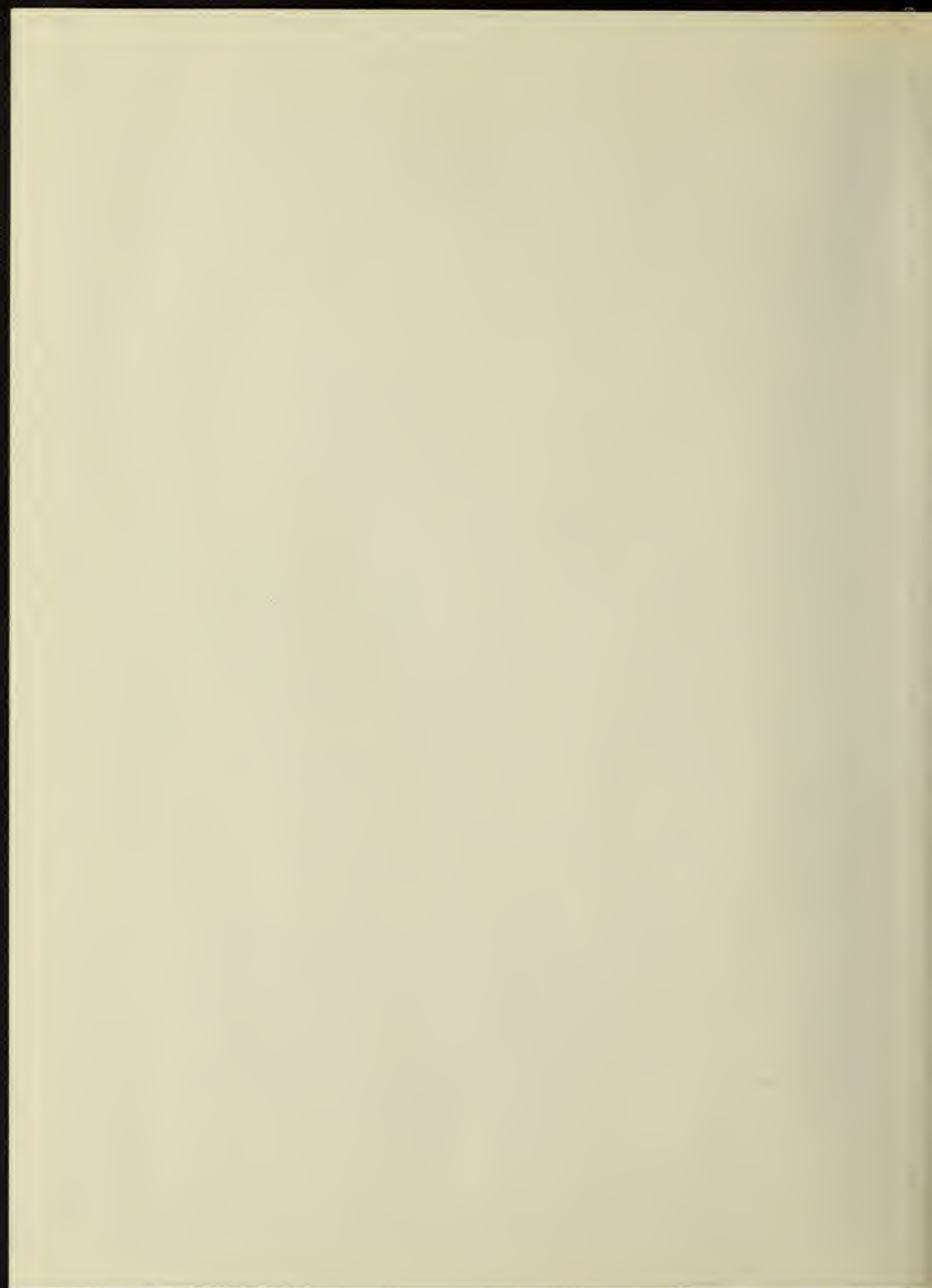
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# MENTAL HEALTH STATISTICS

## Current Reports

FEDERAL SECURITY AGENCY, Public Health Service, National Institute of Mental Health

September 1949

Washington 25, D. C.

Series MH-B50, No. 1

### PATIENTS IN MENTAL INSTITUTIONS: 1947

and

### IN PUBLIC HOSPITALS: 1947

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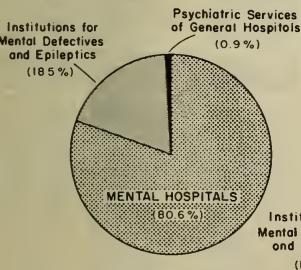
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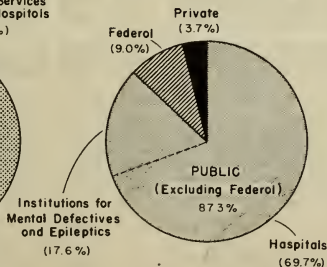
g in all mental hospitals and institutions in-  
representing about 2 percent of the 661,356 in  
f the beginning of the year.  
mber of resident patients with mental disorders  
ear, more than 87 percent were in public insti-  
Federal hospitals, 9 percent were in Federal  
s than 4 percent were in institutions operated  
charitable auspices. The 470,000 psychiatric  
mental hospitals were distributed as follows:  
7 percent; county and city hospitals, 5.0 percent;  
syphopathic hospitals under State control, 0.3  
or the relatively few patients in several State  
itals, all public mental hospitals provide long-  
patients in their custody.

### ED STATES, 1947

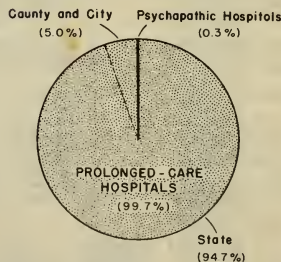
#### BY TYPE OF INSTITUTION \*



#### BY CONTROL OF INSTITUTION \*



#### IN PUBLIC HOSPITALS \*\* (Excluding Federal)



\* Distribution of 674,982 Patients in Institutions at End of Year  
 \*\* Distribution of 470,251 Patients in Public Hospitals at End of Year



# MENTAL HEALTH STATISTICS

## Current Reports

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### PATIENTS IN MENTAL INSTITUTIONS: 1947

and

### ADMINISTRATIVE STATISTICS FOR PUBLIC MENTAL HOSPITALS: 1947

During 1947, an estimated total of more than 1,000,000 persons were reported as receiving treatment by 934 hospitals or institutions offering treatment for psychiatric patients in the United States. Since some of these persons were admitted to more than one hospital or to the same hospital two or more times, about 140,000 patient transactions were reported.

By the end of 1947, 674,982 persons, or 473.1 out of every 100,000 in the civilian population of the continental United States, remained in mental hospitals or institutions as resident patients. Of this number, 543,726 persons or 381.1 per 100,000 population were in mental hospitals, 125,123 persons or 87.7 per 100,000 population were in institutions for mental defectives and epileptics, and 6,133 or 4.3 per 100,000 population were in psychiatric services of general hospitals. During the year, the number of resident

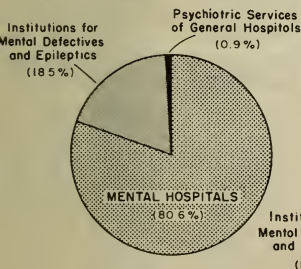
patients remaining in all mental hospitals and institutions increased by 13,626, representing about 2 percent of the 661,356 in such institutions at the beginning of the year.

Of the entire number of resident patients with mental disorders at the end of the year, more than 87 percent were in public institutions other than Federal hospitals, 9 percent were in Federal hospitals, and less than 4 percent were in institutions operated under private or charitable auspices. The 470,000 psychiatric patients in public mental hospitals were distributed as follows: State hospitals, 94.7 percent; county and city hospitals, 5.0 percent; and specialized psychopathic hospitals under State control, 0.3 percent. Except for the relatively few patients in several State psychopathic hospitals, all public mental hospitals provide long-term care for the patients in their custody.

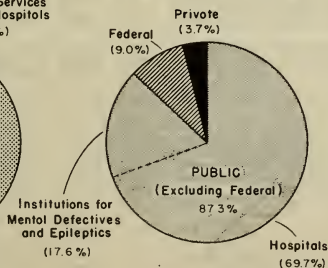
### PATIENTS IN MENTAL INSTITUTIONS, UNITED STATES, 1947

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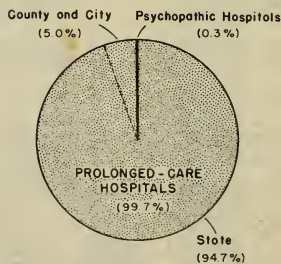
#### BY TYPE OF INSTITUTION \*



#### BY CONTROL OF INSTITUTION \*



#### IN PUBLIC HOSPITALS \*\* (Excluding Federal)



\* Distribution of 674,982 Patients in Institutions at End of Year

\*\* Distribution of 470,251 Patients in Public Hospitals at End of Year



The statistics presented here cover either the calendar year or the fiscal year ending in the calendar year and are based upon data furnished to the National Institute of Mental Health by the individual institutions or appropriate coordinating offices. The statistics on veterans' hospitals are adjusted figures based on tabulations prepared by the Division of Medical Research Statistics of the Veterans Administration and cover veteran neuropsychiatric patients under the care of the Veterans Administration in Federal hospitals of all types. The figures are substantially complete for all public hospitals and institutions with the exception of several county institutions. Although reports were not received from an appreciable number of the smaller private hospitals, institutions or psychiatric services, the overall coverage in terms of resident patients, is estimated to be better than 95 percent complete.

**Movement of Population.**--Statistics on the movement of population present a formal accounting of the flow of patients in or out of institutions during the course of the year. Population movement involves four major categories: (1) patients on the books at the beginning of the year; (2) all admissions; (3) all separations; and (4) patients on the books at the end of the year. For any year the number of patients on the books at the beginning of the year plus the total number of admissions should equal the sum of all separations during the year plus the number of patients on the books at the end of the year. The flow of mental patients in and out of hospitals is complicated by the transfer of patients from one hospital to another. Ideally, it would be preferable to eliminate all transfers from consolidated tables in order to approximate the number of persons under treatment during any one year. However, since in-transfers are always under-reported, this adjustment is exceedingly difficult and has therefore been postponed for more complete analysis in a later report.

Table 1 shows the movement of population for all mental institutions by type of hospital or institution. The chart facing table 1 presents graphically the movement of patients in all public mental hospitals (see column 3 of table 1). Public mental hospitals account for well over half the patients receiving treatment during the year

and approximately 70 percent of all patients on the books at the end of the year.

In contrast to the rapid turnover of patients in general hospitals, mental patients in public mental hospitals have a very slow rate of turnover since many mental patients prove to have a chronic type of disorder which necessitates their retention in hospital for several years. The patients accumulated from year to year gradually build up a semi-permanent hospital population.

Each succeeding year finds a consistently greater number of patients in public mental hospitals. While a constantly increasing number of beds has been provided for the care of such patients, at no time has the number of beds provided in the United States been sufficient to furnish adequate facilities for all patients. As additional construction is completed, there is usually a greater influx of patients than the facilities were intended to accommodate. Consequently, in a preponderance of States, there is almost always a certain amount of overcrowding.

Table 2 presents the basic data on the movement of population in public hospitals for mental diseases for the United States and for Divisions and States; due to limitations of space, totals for various categories have been eliminated.

Table 3 presents summary rates for the more important categories of patient movement shown in table 2, both as rates per 1,000 patients on the books during the year as well as per 100,000 of the estimated civilian population for July 1, 1947 by Divisions and States. For the United States, the rates per 1,000 patients on the books during the year as shown in table 3 are also presented in the chart on page 3 along with the additional components which make up the complete movement of population.

Rates per 100,000 population for patients on the books during the year, resident patients at the end of the year, and first admissions, as shown in table 3, provide a basis for making inferences concerning the extent to which the several States provide care for their mentally ill. It would be desirable, of course, to include in such rates all patients hospitalized in facilities of the Veterans Administration, in private hospitals, and in psychiatric services of general hospitals; for such patients, however, com-

TABLE 1.--MOVEMENT OF POPULATION, SUMMARY, FOR ALL MENTAL INSTITUTIONS, BY TYPE OF HOSPITAL OR INSTITUTION, BY CONTROL, FOR THE UNITED STATES: 1947

INSTITUTIONS AND MOVEMENT OF PATIENTS	ALL HOSPITALS, SERVICES, AND INSTITUTIONS	MENTAL HOSPITALS								PSYCHI- ATRIC SERVICES  GENERAL HOSPITALS	INSTITUTIONS FOR MENTAL DEFECTIVES AND EPILEPTICS		
		Total	PUBLIC				FEDERAL				Total	Public	Private
			Total	State	County and City	Psy- cho- pathic	Veterans	Other Federal	Private				
Number of Institutions <sup>1</sup>	934	628	304	195	93	16	122	5	197	103	203	94	109
All Patients on Books During Year	1,139,779	871,051	673,405	633,766	30,184	9,455	115,742	16,733	65,131	111,999	156,729	148,888	7,841
Patients on Books at Beginning of Year	757,759	610,252	533,053	506,778	25,012	1,263	54,198	8,959	14,042	5,748	141,759	135,264	6,495
In Hospital	661,356	533,003	463,848	439,437	23,459	952	48,235	8,515	12,405	5,748	122,605	116,278	6,327
In Family Care	2,940	2,051	2,051	2,051	--	--	--	--	--	--	889	889	--
In Other Extramural Care	93,463	75,198	67,154	65,290	1,553	311	5,963	444	1,637	--	18,265	18,097	168
Admissions During Year	366,473	246,881	131,855	119,508	4,455	7,892	57,065	7,814	50,147	106,251	13,341	12,012	1,329
First Admissions	275,929	178,771	100,314	90,583	3,376	6,355	39,186	5,324	33,947	85,098	12,060	10,810	1,250
Readmissions	90,544	68,110	31,541	28,925	1,079	1,537	17,879	2,490	16,200	21,153	1,281	1,202	79
In-Transfers	15,547	13,918	8,497	7,480	717	300	4,479	--	942	--	1,629	1,612	17
Separations During Year	308,886	228,028	121,889	110,369	4,528	6,992	49,078	7,782	49,279	70,024	10,834	9,717	1,117
Discharges	254,428	179,919	78,154	69,008	2,288	6,858	47,310	7,262	47,193	66,924	7,585	6,672	913
From Hospital	192,292	122,747	32,658	24,591	1,420	6,647	38,328	6,934	44,827	66,924	2,621	1,719	902
From Extramural Care	62,136	57,172	45,496	44,417	868	211	8,982	328	2,366	--	4,964	4,953	11
Deaths	54,458	46,109	43,735	41,361	2,240	134	1,768	520	2,036	3,100	3,249	3,045	204
In Hospital	53,349	47,174	42,850	40,631	2,086	133	1,768	520	2,036	3,100	3,075	2,873	202
In Extramural Care	1,109	935	885	730	154	1	--	--	50	--	174	172	2
Out-Transfers	57,801	19,945	10,912	9,409	619	884	7,223	14	1,796	<sup>2</sup> 35,842	2,014	1,876	138
Patients on Books at End of Year	773,092	623,078	540,604	531,988	25,037	1,579	59,441	8,977	14,056	6,133	143,881	137,295	5,586
In Hospital	674,982	543,726	470,251	445,365	23,643	1,243	52,505	8,595	12,375	6,133	125,123	118,703	6,420
In Family Care	3,177	2,244	2,244	2,244	--	--	--	--	--	--	933	933	--
In Other Extramural Care	94,933	77,108	68,109	66,379	1,394	336	6,936	382	1,681	--	17,825	17,659	166

<sup>1</sup>Coverage is substantially complete for all known mental hospitals and institutions; patients treated in Psychiatric Services of General Hospitals are underenumerated to an unknown degree; Veterans hospitals listed in 89 non-mental as well as 33 neuropsychiatric hospitals are included; psychiatric patients treated in hospitals operated by the Armed Services are not included in the survey.

<sup>2</sup>Substantially all out-transfers from Psychiatric Services of General Hospitals are admitted to public mental hospitals either as first or readmissions.

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parable data are not available by State of home residence for 1947. The statistics for public mental hospitals thus constitute the broadest base available for the purpose of making State comparisons.

Administrative Statistics.--Statistics for public mental hospitals on overcrowding, administrative staff, and expenditures are reported in tables 4, 5, and 6 respectively. Tables 6 and 7 present

Administrative Staff.--The adequacy of care received by patients in any hospital largely depends upon the availability of a well trained administrative staff. Data concerned solely with the number and types of personnel on duty in public mental hospitals in 1947 are shown in table 5 along with the ratio of the average number of patients served per full-time employee. For the United States, each full-time employee cared for an average of 5.7 patients

### Page 3. Administrative Statistics.--References to table 7 should read table 5.

mean and expenditures report data on about 3 percent fewer patients than tables 2, 3, and 4.

Overcrowding.--In table 4, the degree of overcrowding in public mental hospitals is indicated by the relation of the average daily resident-patient population to the normal capacity of the hospitals. The excess of population over normal capacity is expressed as a percentage of normal capacity. While normal capacity has not been defined uniformly from hospital to hospital, it is evident that beds have usually been crowded into space never intended to hold them. In 1947, the degree of overcrowding in public hospitals for mental disease in the United States was 16.7 percent; this contrasts with an average excess of patients over normal capacity of 16.3 percent in 1946. The greatest degree of overcrowding in 1947 was reported for Illinois, Louisiana, and Arizona with over 50 percent excess of population over normal capacity. Seven States reported a greater normal capacity than their average daily patient population; these were South Dakota, Nebraska, Delaware, Florida, Texas, Wyoming, and New Mexico. This does not necessarily mean that these latter States provided proportionately greater or more adequate facilities than their sister States (see last three columns of table 3) but merely that proportionately fewer patients were crowded into space available.

Expenditures.--In table 6, statistics on expenditures, classified by purpose of the expenditure, are presented for public mental hospitals, by Divisions and States. The per capita expenditure for maintenance for public mental hospitals reporting such data for 1947 was \$545.60 compared with a figure of approximately \$430.13 in 1946. In contrast to the low per capita expenditure for maintenance of patients in public mental hospitals, the comparable figure for veterans cared for in neuropsychiatric hospitals of the Veterans Administration was approximately \$2,133 and for patients treated in private mental hospitals, an estimated \$2,500. Some of the variations apparent from the inter-state comparisons shown in table 6 may reflect geographic and fiscal year variations in the general price level. For the most part, however, the variations are believed to constitute a rough index of the type of care provided.

## MOVEMENT OF PSYCHIATRIC PATIENTS, ALL PUBLIC HOSPITALS, FOR THE UNITED STATES, 1947

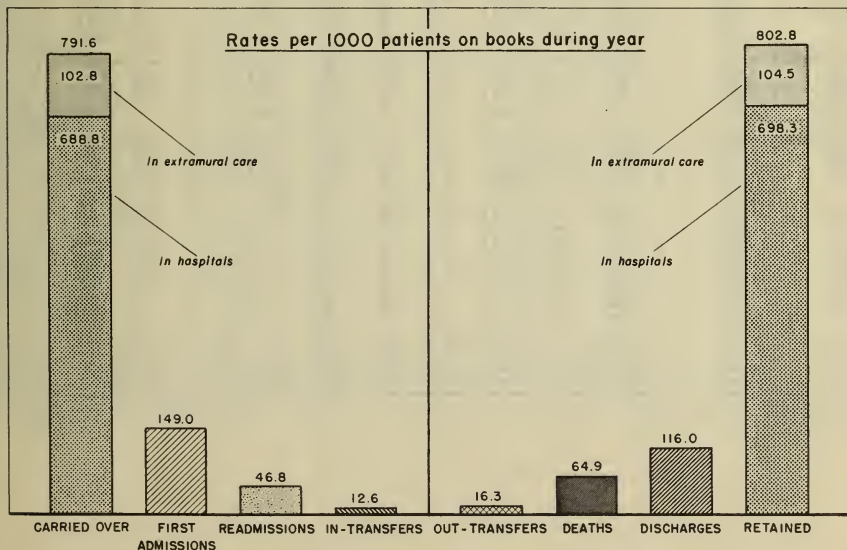




TABLE 2.--MOVEMENT OF POPULATION IN PUBLIC (EXCLUDING FEDERAL) HOSPITALS FOR MENTAL DISEASE, BY DIVISIONS AND STATES: 1947

(Statistics based on reports from 304 hospitals as follows: 195 State, 93 County and City, 16 Psychopathic)

DIVISION AND STATE	PATIENTS ON BOOKS AT BEGINNING OF YEAR			ADMISSIONS DURING YEAR			SEPARATIONS DURING YEAR						PATIENTS ON BOOKS AT END OF YEAR		
	In Hospital	In Family Care	In Other Extra- mural Care	First Admis- sions	Re- admis- sions	In Transfers	Discharges		Deaths		Out Transfers	In Hospital	In Family Care	In Other Extra- mural Care	
							From Hospi- tal	From Extra- mural Care	In Hospi- tal	In Extra- mural Care					
UNITED STATES	463,848	2,051	67,154	100,314	31,541	8,497	32,658	45,496	42,850	885	10,912	470,251	2,244	68,109	
NEW ENGLAND	40,301	449	4,798	9,061	3,959	348	4,099	3,829	4,341	89	672	40,622	457	4,807	
Maine	2,643	--	177	573	207	2	176	207	273	--	2	2,746	--	198	
New Hampshire	2,356	--	356	659	257	--	--	530	286	--	--	2,408	--	404	
Vermont	1,093	--	17	268	140	--	180	72	128	--	--	1,123	--	15	
Massachusetts	23,196	213	2,683	5,229	2,412	316	2,803	1,858	2,365	56	649	23,312	210	2,796	
Rhode Island	2,999	413	230	561	203	9	137	283	433	19	4	2,918	238	383	
Connecticut	8,014	6	1,152	1,771	740	21	803	879	856	14	17	8,115	9	1,011	
MIDDLE ATLANTIC	129,460	1,029	14,691	22,460	7,273	1,948	4,536	11,100	11,685	229	2,398	130,595	1,051	15,267	
New York	76,788	1,029	7,666	13,920	4,709	1,174	3,225	6,054	7,194	159	1,371	77,965	1,051	8,267	
New Jersey	17,347	--	2,258	3,816	1,297	312	1,311	1,610	1,916	70	416	17,491	--	2,212	
Pennsylvania	35,325	--	4,767	4,724	1,267	462	--	3,436	2,571	--	611	35,139	--	4,788	
EAST NORTH CENTRAL	95,832	365	13,707	20,776	6,823	2,465	9,088	8,047	8,789	224	2,942	97,260	498	13,120	
Ohio	21,533	--	4,609	5,938	1,136	1,435	2,242	2,496	1,788	27	1,360	22,334	2	4,402	
Indiana <sup>1</sup>	9,099	--	501	1,313	307	14	96	564	877	29	4	8,982	--	582	
Illinois <sup>2</sup>	33,066	182	2,645	7,591	3,393	170	4,291	2,479	3,453	--	203	33,530	231	2,860	
Michigan	18,604	183	4,215	3,243	686	141	559	1,434	1,539	46	145	18,950	265	4,134	
Wisconsin	13,530	--	1,737	2,691	1,301	705	1,900	974	1,132	122	1,230	13,464	--	1,142	
WEST NORTH CENTRAL	44,048	--	6,029	7,332	1,670	521	1,667	3,588	3,802	149	639	43,822	--	5,933	
Minnesota	10,535	--	2,007	1,974	401	348	368	1,216	1,094	45	348	10,420	--	1,774	
Iowa	8,216	--	857	1,384	352	162	441	572	662	39	257	8,109	--	891	
Missouri	12,290	--	1,204	1,884	470	6	282	1,068	1,033	16	6	12,240	--	1,209	
North Dakota	2,029	--	189	325	101	--	83	138	146	8	--	2,053	--	216	
South Dakota	1,591	--	62	339	107	--	254	47	176	--	--	1,570	--	52	
Nebraska	4,320	--	581	725	119	3	139	374	288	12	2	4,381	--	552	
Kansas	5,067	--	1,129	701	120	2	100	173	403	29	26	5,049	--	1,239	
SOUTH ATLANTIC	49,115	208	8,624	11,370	3,984	592	2,589	6,686	4,529	58	1,288	50,127	233	8,383	
Delaware	1,242	--	289	365	91	--	125	144	115	--	--	1,270	--	313	
Maryland	7,116	208	1,142	1,314	522	99	301	917	581	10	55	7,170	229	1,138	
Virginia	9,692	--	1,922	2,145	1,421	119	1,150	1,390	1,041	36	147	9,528	--	2,007	
West Virginia	4,407	--	928	1,417	510	165	510	954	422	6	163	4,530	--	842	
North Carolina	7,542	--	1,676	1,659	336	194	124	1,093	659	2	311	7,819	4	1,395	
South Carolina	4,836	--	900	1,286	346	--	252	497	498	--	--	4,928	--	923	
Georgia	8,815	--	1,213	1,596	484	--	61	1,024	787	--	--	9,018	--	1,218	
Florida	5,465	--	554	1,608	274	15	66	397	426	4	612	5,864	--	547	
EAST SOUTH CENTRAL	23,267	--	3,478	6,097	1,786	490	1,249	3,487	2,196	12	441	24,006	5	3,722	
Kentucky	6,504	--	954	1,473	310	399	315	582	716	12	390	6,613	5	1,007	
Tennessee	6,825	--	455	1,734	431	91	860	438	539	--	51	7,181	--	457	
Alabama	5,664	--	797	1,475	595	--	56	1,334	479	--	--	5,816	--	846	
Mississippi	4,274	--	1,272	1,415	450	--	18	1,133	462	--	--	4,396	--	1,402	
WEST SOUTH CENTRAL	32,353	--	6,490	8,655	2,632	74	3,553	4,110	2,746	63	382	32,733	--	6,617	
Arkansas	4,725	--	1,874	1,516	534	--	254	1,265	670	--	--	4,759	--	1,701	
Louisiana	6,761	--	1,474	1,356	258	7	153	773	531	12	3	6,788	--	1,596	
Oklahoma	7,393	--	620	1,309	608	10	529	826	515	2	50	7,382	--	636	
Texas <sup>3</sup>	13,474	--	2,522	4,474	1,232	57	2,617	1,246	1,930	49	329	13,804	--	2,684	
MOUNTAIN	11,740	--	1,785	3,142	874	238	1,823	681	1,024	29	236	12,141	--	1,845	
Montana	1,820	--	--	245	184	--	268	--	136	--	2	1,843	--	--	
Idaho	1,061	--	177	223	46	2	73	97	91	6	--	1,089	--	153	
Wyoming	588	--	62	113	59	--	40	69	60	--	--	594	--	59	
Colorado	4,597	--	493	1,449	380	236	933	193	419	8	234	4,814	--	554	
New Mexico	1,429	--	607	715	11	--	39	50	72	14	--	976	--	630	
Arizona	1,229	--	223	457	86	--	218	111	124	1	--	1,314	--	227	
Utah	1,140	--	183	314	97	--	210	107	79	--	--	1,159	--	179	
Nevada	357	--	40	126	11	--	42	54	43	--	--	352	--	43	
PACIFIC	37,732	--	7,552	11,421	2,540	1,821	4,054	3,968	3,738	32	1,914	38,945	--	8,415	
Washington	6,778	--	936	1,487	346	235	297	778	788	22	258	6,741	--	898	
Oregon	3,958	--	774	1,187	305	8	485	380	454	10	10	4,040	--	853	
California	26,996	--	5,842	8,747	1,889	1,578	3,272	2,810	2,496	--	1,646	28,164	--	6,666	

<sup>1</sup> Indiana State Hospital, estimated.<sup>2</sup> Illinois Neuropsychiatric Institute, estimated.<sup>3</sup> Texas State Hospital, estimated.

TABLE 3.--SUMMARY RATES, MOVEMENT OF POPULATION, FOR PUBLIC (EXCLUDING FEDERAL) HOSPITALS FOR MENTAL DISEASE, BY DIVISIONS AND STATES: 1947

(Statistics based on 304 hospitals as follows: 195 State, 93 County and City, and 16 Psychopathic)

DIVISION AND STATE	RATE PER 1,000 PATIENTS ON BOOKS DURING YEAR <sup>1</sup>					RATE PER 100,000 POPULATION <sup>2</sup>		
	First Admissions	Re-Admissions	All Discharges	All Deaths	Retained on Books End of Year	Patients on Books During Year	Resident Patients, End of Year	First Admissions
UNITED STATES	149.0	46.8	116.0	64.9	802.8	469.6	327.9	69.9
NEW ENGLAND STATES	153.8	67.2	134.6	75.2	778.8	646.4	445.7	99.4
Maine	159.1	57.5	106.3	75.8	817.3	407.5	310.6	64.8
New Hampshire	181.6	70.9	146.1	78.8	775.1	683.2	453.5	124.1
Vermont	176.5	92.3	166.0	84.3	749.7	415.9	307.7	73.4
Massachusetts	153.6	70.8	136.9	71.1	772.9	736.5	504.3	113.1
Rhode Island	127.1	46.0	95.1	102.4	801.6	596.6	394.3	75.8
Connecticut	151.3	63.2	143.7	74.3	780.5	594.1	411.9	89.9
MIDDLE ATLANTIC	127.0	41.1	88.4	67.4	830.7	605.3	446.9	76.9
New York	132.2	44.7	88.1	69.8	829.0	744.6	551.4	98.4
New Jersey	152.4	51.8	116.7	79.5	787.2	546.3	381.7	83.3
Pennsylvania	101.5	27.2	73.8	55.2	857.8	443.4	334.7	45.0
EAST NORTH CENTRAL	148.4	48.7	122.4	64.4	792.2	479.8	333.4	71.2
Ohio	171.4	32.8	136.7	52.4	771.6	451.9	291.3	77.4
Indiana	116.9	27.3	67.6	80.6	851.3	293.1	234.3	34.2
Illinois	161.3	72.1	143.9	73.4	778.4	562.5	400.9	90.8
Michigan	119.8	25.3	73.6	58.5	862.5	446.8	312.8	53.5
Wisconsin	134.8	65.2	144.0	62.8	731.6	615.0	414.8	82.9
WEST NORTH CENTRAL	123.0	28.0	88.2	66.3	834.8	435.4	320.1	53.6
Minnesota	129.3	26.3	103.8	74.6	798.8	528.6	360.8	68.4
Iowa	126.2	32.1	92.3	63.9	820.3	423.6	313.1	53.4
Missouri	118.8	29.6	85.2	66.2	848.3	406.4	313.8	48.3
North Dakota	122.9	31.2	83.6	58.2	858.2	488.7	379.5	60.1
South Dakota	161.5	58.0	143.4	83.9	772.7	365.0	273.0	59.0
Nebraska	126.1	20.7	89.2	52.2	858.2	448.4	341.7	56.6
Kansas	99.9	17.1	38.9	61.5	895.8	366.9	263.9	36.6
SOUTH ATLANTIC	153.9	53.9	125.5	62.1	795.0	387.8	263.1	59.7
Delaware	175.4	46.3	136.8	58.4	804.8	678.3	437.9	119.0
Maryland	126.3	50.2	117.1	56.8	820.8	492.7	339.6	62.2
Virginia	140.2	92.9	166.0	70.4	754.0	517.7	322.4	72.6
West Virginia	190.8	68.7	197.1	57.6	723.3	394.6	240.7	75.3
North Carolina	145.4	29.4	106.7	57.9	808.1	311.7	213.6	45.3
South Carolina	174.5	47.0	138.3	67.6	794.1	382.0	255.5	66.7
Georgia	131.8	40.0	89.6	65.0	845.4	388.8	289.6	51.2
Florida	203.1	34.6	58.5	54.3	809.9	347.2	257.2	70.5
EAST SOUTH CENTRAL	173.6	50.8	134.8	62.9	789.7	326.3	223.1	56.6
Kentucky	152.8	32.2	93.0	75.5	791.0	349.1	239.5	53.4
Tennessee	181.8	45.2	136.1	56.5	802.0	309.0	232.7	56.2
Alabama	172.9	69.7	162.9	56.2	780.9	301.8	205.7	52.2
Mississippi	190.9	60.8	155.3	62.3	782.4	355.1	210.6	67.8
WEST SOUTH CENTRAL	172.4	52.4	152.6	56.0	783.8	365.1	238.0	62.9
Arkansas	175.3	61.7	175.6	77.5	746.9	452.4	248.9	79.3
Louisiana	137.6	26.2	94.0	55.1	850.6	388.8	267.8	53.5
Oklahoma	131.7	61.2	136.3	52.0	806.6	436.9	324.5	57.5
Texas	205.6	56.6	177.5	49.6	757.8	309.5	196.4	63.6
MOUNTAIN	176.7	49.2	140.8	59.2	786.6	408.6	279.0	72.2
Montana	108.9	81.9	119.2	60.5	819.5	461.8	378.4	50.3
Idaho	147.8	30.5	112.6	64.3	823.1	287.4	207.4	42.5
Wyoming	137.3	71.7	132.6	73.0	796.4	316.2	226.5	43.6
Colorado	202.5	53.1	157.4	59.7	750.2	634.9	427.2	128.6
New Mexico	120.7	6.2	50.0	48.3	901.7	331.0	181.4	40.0
Arizona	229.1	43.1	164.9	62.7	772.4	313.2	206.3	71.7
Utah	181.1	55.9	182.8	45.6	771.6	271.8	181.7	49.2
Nevada	236.0	20.6	179.8	80.5	739.7	384.2	253.2	90.6
PACIFIC	187.0	41.6	131.4	61.7	775.6	450.6	287.4	84.3
Washington	152.0	35.4	109.9	82.8	780.9	421.8	290.7	64.1
Oregon	190.5	48.9	138.8	74.4	785.1	403.6	261.6	76.9
California	194.2	41.9	135.0	55.4	773.1	465.0	290.7	90.3

<sup>1</sup>Patients on Books During Year includes patients on books at beginning of year, all admissions during year, and all in-transfers.<sup>2</sup>Based on estimated civilian population, July 1, 1947.

TABLE 4.--NUMBER OF HOSPITALS, AVERAGE DAILY RESIDENT-PATIENT POPULATION AND NORMAL CAPACITY OF PUBLIC (EXCLUDING FEDERAL) HOSPITALS FOR MENTAL DISEASE, BY DIVISIONS AND STATES: 1947

(Statistics based on 304 hospitals as follows: 195 State, 93 County and City, and 16 Psychopathic)

DIVISION AND STATE	NUMBER OF HOSPITALS				Total Average Daily Resident-Patient Population	Normal Capacity of Hospitals	EXCESS OF POPULATION OVER CAPACITY (OVERCROWDING) <sup>1</sup>	
	Total	State	County and City	Psychopathic			Number	Percent of Capacity
UNITED STATES	304	195	93	16	468,243	401,161	67,082	16.7
NEW ENGLAND	22	21	--	1	40,745	34,531	6,214	18.0
Maine	2	2	--	--	2,701	2,159	542	25.1
New Hampshire	1	1	--	--	2,405	2,050	355	17.3
Vermont	1	1	--	--	1,104	858	246	28.7
Massachusetts	14	13	--	1	23,475	19,512	3,963	20.3
Rhode Island	1	1	--	--	2,970	2,700	270	10.0
Connecticut	3	3	--	--	8,090	7,252	838	11.6
MIDDLE ATLANTIC	50	42	6	2	130,244	106,537	23,707	22.2
New York	22	21	--	1	77,401	65,735	11,666	17.7
New Jersey	9	3	6	--	17,465	13,331	4,134	31.0
Pennsylvania	19	18	--	1	35,378	27,471	7,907	28.8
EAST NORTH CENTRAL	85	40	38	7	96,621	79,158	17,463	22.1
Ohio	18	12	--	6	22,086	19,649	2,437	12.4
Indiana	6	6	--	--	9,043	9,040	3	0.0
Illinois	12	11	--	1	33,008	21,984	11,024	50.1
Michigan	8	8	--	--	18,974	15,264	3,710	24.3
Wisconsin	41	3	38	--	13,510	13,221	289	2.2
WEST NORTH CENTRAL	71	24	46	1	44,052	41,517	2,535	6.1
Minnesota	7	7	--	--	10,493	10,365	128	1.2
Iowa	51	5	45	1	8,168	6,684	1,484	22.2
Missouri	5	4	1	--	12,307	11,268	1,039	9.2
North Dakota	1	1	--	--	2,046	2,000	46	2.3
South Dakota	1	1	--	--	1,636	1,888	-252	-13.3
Nebraska	3	3	--	--	4,338	4,356	-18	-0.4
Kansas	3	3	--	--	5,064	4,956	108	2.2
SOUTH ATLANTIC	23	22	--	1	49,516	44,449	5,067	11.4
Delaware	2	1	--	1	1,260	1,290	-30	-2.3
Maryland	4	4	--	--	7,104	6,322	782	12.4
Virginia	5	5	--	--	9,609	8,300	1,309	15.8
West Virginia	5	5	--	--	4,485	3,670	815	22.2
North Carolina	3	3	--	--	7,578	7,423	155	2.1
South Carolina	1	1	--	--	4,842	4,652	190	4.1
Georgia	1	1	--	--	8,895	6,500	2,395	36.8
Florida	2	2	--	--	5,743	6,292	-549	-8.7
EAST SOUTH CENTRAL	14	11	2	1	23,639	22,140	1,499	6.8
Kentucky	4	4	--	--	6,612	6,300	312	5.0
Tennessee	6	3	2	1	6,967	6,290	677	10.8
Alabama	2	2	--	--	5,732	5,700	32	0.6
Mississippi	2	2	--	--	4,328	3,850	478	12.4
WEST SOUTH CENTRAL	14	13	--	1	33,076	30,121	2,955	9.8
Arkansas	1	1	--	--	4,770	4,759	11	0.2
Louisiana	2	2	--	--	6,895	4,361	2,534	58.1
Oklahoma	4	4	--	--	7,675	7,100	575	8.1
Texas	7	6	--	1	13,736	13,901	-165	-1.2
MOUNTAIN	10	9	--	1	12,069	10,302	1,767	17.2
Montana	1	1	--	--	1,831	1,500	331	22.1
Idaho	2	2	--	--	1,088	1,080	8	0.7
Wyoming	1	1	--	--	648	650	-2	-0.3
Colorado	2	1	--	1	4,746	3,836	910	23.7
New Mexico	1	1	--	--	975	1,000	-25	-2.5
Arizona	1	1	--	--	1,275	850	425	50.0
Utah	1	1	--	--	1,152	1,086	66	6.1
Nevada	1	1	--	--	354	300	54	18.0
PACIFIC	15	13	1	1	38,281	32,406	5,875	18.1
Washington	3	3	--	--	6,826	5,600	1,226	21.9
Oregon	2	2	--	--	4,046	3,610	436	12.1
California	10	8	1	1	27,409	23,196	4,213	18.2

<sup>1</sup> A minus sign (-) denotes excess of capacity over population.

TABLE 5.--ADMINISTRATIVE STAFF, FULL-TIME, OF PUBLIC HOSPITALS FOR MENTAL DISEASE, BY OCCUPATION, BY DIVISIONS AND STATES: 1947

(Statistics based on reports from 248 hospitals as follows: 186 State, 47 County and City, 15 Psychopathic)

DIVISION AND STATE	TOTAL	Superintendents and Physicians	Psychologists and Psychiatrists	Dentists	Dental Assistants	Pharmacists	Clinical Assistants	Laboratory and X-ray Technicians	Graduate Nurses	Other Nurses and Attendants	Therapists and Assistants	Dietitians	Social Workers and Field Workers	Stenographers	Clerical Employees	Other Employees	Average Daily Resident Patient Population <sup>1</sup>	Ratio <sup>2</sup>
UNITED STATES	79,849	2,004	161	192	105	144	35	468	3,165	43,434	1,989	203	659	313	3,696	23,281	454,857	5.7
NEW ENGLAND	7,897	211	34	20	13	15	10	52	480	3,645	228	20	58	46	461	2,604	40,745	5.2
Maine	488	12	2	--	--	1	--	3	15	235	8	1	2	3	24	182	2,701	5.5
New Hampshire	660	13	3	1	2	--	--	2	46	331	18	1	5	2	40	196	2,405	3.6
Vermont	203	6	--	--	--	1	1	--	9	7	--	--	1	3	7	75	1,104	5.4
Massachusetts	4,445	123	13	13	7	11	2	28	286	2,022	124	10	37	22	249	1,498	23,475	5.3
Rhode Island	475	15	2	1	--	--	--	7	31	239	8	3	4	2	34	129	2,970	6.2
Connecticut	1,626	42	14	5	3	2	8	12	97	721	63	5	9	14	107	524	8,090	5.0
MIDDLE ATLANTIC	26,781	678	40	58	44	45	5	150	1,655	14,200	834	75	261	53	1,283	7,400	128,349	4.8
New York	16,792	426	18	38	31	27	--	78	1,150	9,371	555	37	168	23	750	4,120	77,401	4.6
New Jersey	3,911	108	6	7	3	7	2	38	170	1,742	139	11	49	8	253	1,368	17,465	4.5
Pennsylvania	6,078	144	16	13	10	11	3	34	335	3,087	140	27	44	22	280	1,912	33,483	5.5
EAST NORTH CENTRAL	16,143	402	40	45	14	28	18	103	422	8,594	391	35	173	76	794	5,908	91,603	5.7
Ohio	4,328	82	14	9	4	4	2	21	170	2,653	79	6	23	43	149	1,069	22,086	5.1
Indiana	2,472	24	--	4	--	--	--	3	11	602	12	1	4	3	42	362	8,712	8.1
Illinois	5,641	155	16	15	9	13	--	53	96	2,567	189	7	103	8	326	2,084	32,532	5.8
Michigan	2,907	61	10	6	--	6	9	20	92	1,467	72	6	38	15	197	908	14,763	5.1
Wisconsin	2,195	80	--	11	1	3	5	6	53	1,305	39	15	5	7	80	585	13,510	6.2
WEST NORTH CENTRAL	6,478	144	8	16	10	15	1	35	169	3,694	112	13	21	31	253	1,956	42,384	6.5
Minnesota	1,468	31	--	5	2	1	--	9	92	859	32	1	2	12	55	367	10,493	7.1
Iowa	1,045	34	3	1	--	4	1	9	12	474	17	4	11	8	57	410	6,500	6.2
Missouri	1,930	32	2	2	3	6	--	11	28	1,162	30	7	6	5	71	565	12,307	6.4
North Dakota	268	5	1	1	1	1	--	2	2	165	5	--	--	--	6	79	2,046	7.6
South Dakota	285	8	--	1	1	--	--	1	1	147	1	--	--	--	14	111	1,636	5.7
Nebraska	920	20	1	4	3	2	--	3	25	583	24	1	2	3	34	215	4,338	4.7
Kansas	562	14	1	2	--	1	--	--	9	304	3	--	--	3	16	209	5,064	9.0
SOUTH ATLANTIC	7,176	164	10	18	7	8	--	45	145	4,044	93	17	37	34	289	2,265	49,516	6.9
Delaware	211	12	2	--	--	1	--	2	13	102	9	2	3	1	19	45	1,260	6.0
Maryland	981	37	2	2	--	1	--	5	6	608	13	1	19	8	50	229	7,104	7.2
Virginia	1,325	23	3	3	--	--	--	5	23	845	11	4	2	4	65	337	9,609	7.2
West Virginia	577	22	1	1	--	1	--	4	12	321	23	4	7	6	33	142	4,495	7.8
North Carolina	1,143	22	1	3	--	2	--	6	28	632	21	3	4	6	30	385	7,578	6.6
South Carolina	775	12	--	1	--	1	--	5	18	342	5	1	1	2	24	363	4,842	6.2
Georgia	1,026	17	--	2	2	1	--	7	21	622	8	1	2	21	321	8,895	8.7	
Florida	1,138	19	1	6	5	1	--	11	24	572	3	1	--	5	47	443	5,743	5.0
EAST SOUTH CENTRAL	2,845	77	2	4	4	7	1	14	45	1,661	63	6	6	10	92	853	21,127	7.4
Kentucky	900	27	--	1	2	2	1	2	14	510	26	1	2	5	33	274	6,612	7.3
Tennessee	558	18	1	2	--	1	--	7	15	347	3	3	1	1	18	141	4,455	8.0
Alabama	754	12	1	--	1	2	--	4	8	461	6	1	--	3	26	229	5,732	7.6
Mississippi	633	20	--	1	1	2	--	1	8	343	28	1	3	1	15	209	4,328	6.8
WEST SOUTH CENTRAL	4,376	100	3	9	4	11	--	19	50	2,466	90	14	20	17	171	1,402	30,783	7.0
Arkansas	911	12	--	2	1	1	--	4	10	528	9	1	1	2	28	312	4,770	5.2
Louisiana	948	16	1	2	1	2	--	2	12	501	16	1	2	--	50	342	6,895	7.3
Oklahoma	910	19	1	1	--	3	--	4	8	540	17	4	2	6	35	270	7,675	8.4
Texas	1,607	53	1	4	2	5	--	9	20	897	48	8	15	9	58	478	11,443	7.1
MOUNTAIN	2,614	76	3	4	3	2	--	17	70	1,545	36	17	17	11	110	703	12,069	4.6
Montana	333	6	2	1	1	--	--	2	8	208	7	1	3	2	14	78	1,831	5.5
Idaho	162	6	--	--	--	--	--	--	3	86	2	1	2	1	11	50	1,088	6.7
Wyoming	90	5	--	--	--	--	--	--	1	62	--	--	--	--	1	4	648	7.2
Colorado	1,193	43	1	2	1	1	--	10	40	658	11	13	9	2	47	355	4,746	4.0
New Mexico	287	5	--	--	--	1	--	1	5	182	6	1	--	--	16	70	975	3.4
Arizona	268	6	--	--	--	--	--	1	3	156	7	1	1	2	10	81	1,275	4.8
Utah	230	4	--	1	1	--	--	2	7	158	3	--	2	2	6	44	1,152	5.0
Nevada	51	1	--	--	--	--	--	--	1	35	--	--	--	1	2	11	354	6.9
PACIFIC	5,539	152	21	18	6	13	--	33	129	3,585	142	6	66	35	243	1,090	38,281	6.9
Washington	1,157	25	2	3	2	3	--	7	35	675	24	1	7	7	52	314	6,826	5.9
Oregon	636	18	4	2	--	1	--	2	20	416	10	1	2	2	16	142	4,046	6.4
California	3,746	109	15	13	4	9	--	24	74	2,494	108	4	57	26	175	634	27,409	7.3

<sup>1</sup>Includes only population of State, City and County, and Psychopathic hospitals reporting administrative staff. Excludes Iowa county homes.<sup>2</sup>Represents number of patients per full-time employee. Based on average daily resident-patient population.



TABLE 6.--EXPENDITURES, TOTAL AND PER CAPITA, OF PUBLIC (EXCLUDING FEDERAL) HOSPITALS FOR MENTAL DISEASE, BY PURPOSE OF EXPENDITURE, BY DIVISIONS AND STATES: 1947  
(Statistics based on 248 hospitals as follows: 186 State, 47 County and City, 15 Psychopathic)

DIVISION AND STATE	TOTAL EXPENDITURES	EXPENDITURES FOR MAINTENANCE					Additions, Improvements, and Other Expenditures	Average Daily Resident-Patient for Population	Per Capita Expenditure for Maintenance
		Total	Salaries and Wages	Purchased Provisions	Fuel, Light and Water	Other Maintenance			
UNITED STATES	\$264,510,810	\$248,170,581	\$132,765,673	\$61,449,204	\$16,075,116	\$37,880,588	\$16,340,229	454,857	545.60
NEW ENGLAND	25,055,909	23,962,162	12,927,811	5,513,133	1,908,937	3,612,281	1,093,747	40,745	588.10
Maine	1,490,679	1,484,164	732,254	440,020	123,989	187,901	6,515	2,701	549.49
New Hampshire	1,888,850	1,666,309	889,020	367,214	146,104	263,971	222,541	2,405	692.85
Vermont	924,458	571,346	302,273	106,477	43,386	119,210	353,112	1,104	517.52
Massachusetts	14,109,565	13,934,882	7,720,042	2,949,991	1,249,405	2,015,444	174,683	23,475	593.60
Rhode Island	1,190,355	1,166,915	639,178	356,971	2,949	167,817	23,440	2,970	392.90
Connecticut	5,452,002	5,138,546	2,645,044	1,292,460	343,104	857,938	313,456	8,090	635.17
MIDDLE ATLANTIC	85,715,719	83,897,646	51,209,351	18,189,487	5,312,595	9,186,213	1,818,073	128,349	653.67
New York	55,259,999	54,366,524	35,124,052	11,446,605	3,255,458	4,540,409	893,475	77,401	702.40
New Jersey	11,465,110	11,277,894	6,617,260	2,050,749	689,252	1,920,633	187,216	17,465	645.74
Pennsylvania	18,990,610	18,253,228	9,468,039	4,692,132	1,367,885	2,125,171	737,382	33,483	545.15
EAST NORTH CENTRAL	59,800,739	55,265,498	28,778,560	14,287,038	3,686,414	8,513,486	4,535,241	91,603	603.32
Ohio	14,039,832	12,390,267	6,862,709	2,866,677	967,511	1,692,970	1,649,565	22,086	561.00
Indiana	3,132,559	2,962,484	1,230,206	761,787	328,141	642,350	170,075	8,712	340.05
Illinois	23,080,300	22,660,539	10,690,259	6,703,139	1,102,647	4,164,494	419,761	32,532	696.56
Michigan	10,590,353	9,093,301	6,168,205	1,961,231	577,963	385,902	1,497,052	14,763	615.95
Wisconsin	8,957,695	8,158,907	3,827,181	1,994,204	709,752	1,627,770	798,788	13,510	603.92
WEST NORTH CENTRAL	18,561,961	17,453,378	8,330,251	4,655,286	1,305,829	3,162,012	1,108,583	42,384	411.79
Minnesota	4,124,449	4,012,291	2,185,183	837,232	304,805	685,071	112,158	382.38	382.38
Iowa	3,027,184	2,817,145	1,352,944	769,388	244,532	450,281	210,039	6,500	433.41
Missouri	5,178,630	5,039,189	2,356,101	1,376,533	392,316	914,239	139,441	12,307	409.46
North Dakota	893,408	854,480	383,229	209,948	65,455	195,848	38,928	2,046	417.63
South Dakota	628,712	597,530	273,762	171,597	51,803	100,368	31,182	1,636	365.24
Nebraska	2,834,937	2,354,881	1,089,246	765,560	130,417	369,658	480,056	4,338	542.85
Kansas	1,874,641	1,777,862	689,786	525,028	116,501	446,547	96,779	5,064	351.08
SOUTH ATLANTIC	22,741,558	20,061,533	8,240,563	6,724,760	1,255,309	3,840,901	2,679,625	49,516	405.15
Delaware	821,892	696,892	306,394	203,857	65,598	121,043	125,000	1,260	553.09
Maryland	3,478,915	3,217,919	1,563,037	912,634	256,541	485,707	260,996	7,104	452.97
Virginia	3,739,782	3,584,450	1,396,603	1,283,567	162,757	741,523	155,332	9,609	373.03
West Virginia	1,644,040	1,566,872	631,477	432,921	77,307	425,167	77,168	4,485	349.36
North Carolina	3,677,535	3,465,292	1,373,725	1,161,944	197,125	732,498	212,243	7,578	457.28
South Carolina	2,252,982	2,252,982	790,381	825,065	55,744	581,792	--	4,842	465.30
Georgia	3,546,301	2,776,187	1,112,710	956,622	228,312	478,543	770,114	8,895	312.11
Florida	3,579,711	2,500,939	1,066,236	948,150	211,925	274,628	1,078,772	5,743	435.48
EAST SOUTH CENTRAL	7,129,714	7,045,033	2,695,473	2,513,630	580,160	1,255,770	84,661	21,127	333.46
Kentucky	2,065,915	2,064,462	849,862	846,962	216,060	151,578	1,453	6,612	312.23
Tennessee	1,320,217	1,287,070	442,829	486,110	113,261	244,870	33,147	4,455	288.90
Alabama	2,402,013	2,402,013	931,966	731,592	148,382	590,073	--	5,732	419.05
Mississippi	1,341,569	1,291,488	470,816	448,966	102,457	269,249	50,081	4,328	298.40
WEST SOUTH CENTRAL	12,855,950	11,845,003	4,147,100	4,064,166	551,266	3,082,471	1,010,947	30,783	384.79
Arkansas	2,008,082	1,722,236	597,901	584,370	86,107	453,858	285,846	4,770	361.06
Louisiana	2,520,547	2,418,401	929,003	998,567	98,173	392,658	102,146	6,895	350.75
Oklahoma	3,052,676	2,679,059	926,489	830,694	138,591	783,285	373,617	7,675	349.06
Texas	5,274,645	5,025,307	1,693,707	1,650,535	228,395	1,452,670	249,338	11,443	439.16
MOUNTAIN	7,567,345	7,300,200	4,013,829	1,324,391	452,305	1,509,675	267,145	12,069	604.87
Montana	885,527	885,527	375,092	344,081	36,188	130,166	--	1,831	483.63
Idaho	583,383	533,981	247,905	110,674	81,064	94,338	49,402	1,088	490.79
Wyoming	161,909	155,762	84,245	46,329	12,592	12,596	6,147	648	240.37
Colorado	3,650,927	3,561,377	2,190,353	486,923	188,434	695,667	101,550	4,746	750.40
New Mexico	576,624	566,153	251,807	123,155	45,824	145,367	10,471	975	580.67
Arizona	866,294	805,176	437,554	116,941	37,945	212,736	61,118	1,275	631.51
Utah	606,818	586,450	359,223	52,290	30,966	143,971	20,368	1,152	509.07
Nevada	223,863	205,774	67,650	43,998	19,292	74,834	18,089	354	581.28
PACIFIC	25,082,315	21,340,128	12,422,735	4,177,313	1,022,301	3,717,779	3,742,187	38,281	557.46
Washington	4,817,847	4,406,580	1,987,457	1,129,784	309,029	980,310	411,267	6,826	645.56
Oregon	2,777,203	1,723,270	907,882	346,150	101,052	368,186	1,053,933	4,046	425.92
California	17,487,265	15,210,278	9,527,396	2,701,739	612,220	2,369,283	2,276,987	27,409	554.94

# MENTAL HEALTH STATISTICS

## Current Reports

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### PATIENTS IN STATE MENTAL HOSPITALS: 1948

The average daily resident patient population in State mental hospitals in 1948 was 463,496. This means that, on the average, there were slightly more than 3 patients per 1,000 population<sup>1</sup> in daily residence in such hospitals throughout the United States during 1948. There was considerable interstate variation, New York, for instance, having a ratio of 5.5 compared to 1.7 in New Mexico.

Since State hospitals accounted, in general,

for about 95 percent of the resident patient population in all non-federal public hospitals for the mentally ill, it would appear that the differences mentioned above are fairly good indices of variation in the extent to which facilities for the care of the mentally ill were available. It is evident from figure 1 that the Southern and Western States, with few exceptions, had low ratios compared to the Northern and Eastern ones. The picture in 1947 was similar to that in 1948.

AVERAGE DAILY RESIDENT PATIENTS IN STATE HOSPITALS FOR MENTAL DISEASE,  
PER 1000 CIVILIAN POPULATION : 1948

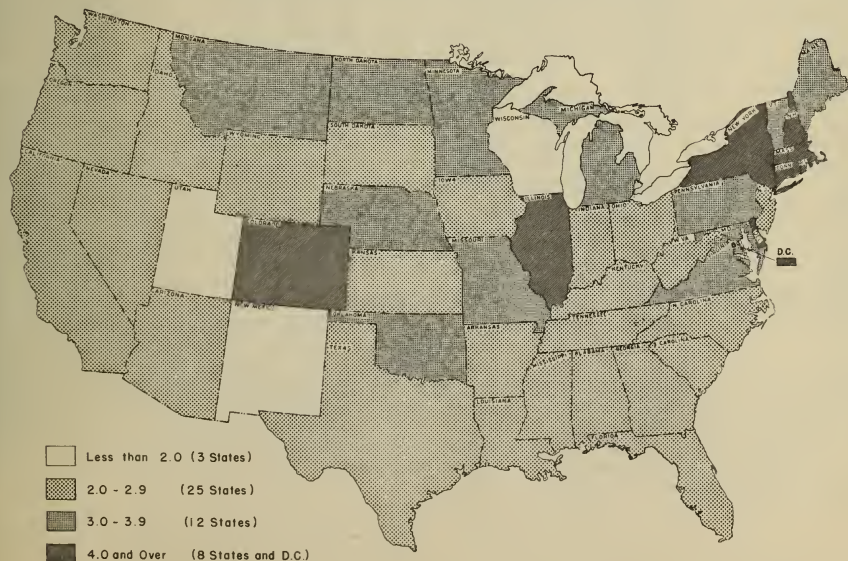


FIGURE 1

<sup>1</sup>Based on estimated civilian population as of July 1 of the corresponding year. Source: Series P-25, Nos. 14 and 21, Dept. of Commerce, Bureau of Census.

TABLE 1.--MOVEMENT OF POPULATION IN STATE HOSPITALS FOR MENTAL DISEASE BY DIVISION AND STATE: 1948

(Statistics based on reports from 199 State and 8 Ohio receiving hospitals)

DIVISION AND STATE	Number of hospitals reporting	ON BOOKS AT BEGINNING OF YEAR			ADMISSIONS DURING YEAR		In transfers	SEPARATIONS DURING YEAR				Out transfers	ON BOOKS AT END OF YEAR		
		In hos- pital	In family care	In other extra- mural care	First admis- sions	Re- admis- sions		Discharges		Deaths			In hos- pital	In family care	In other extra- mural care
								From hos- pital	From extra- mural care	In hos- pital	In extra- mural care				
UNITED STATES	207	455,972	2,237	68,893	101,218	32,296	10,494	30,894	45,998	39,621	770	10,700	469,500	2,635	70,992
NEW ENGLAND	21	40,522	455	4,611	9,445	3,831	267	3,778	4,017	4,064	46	542	41,383	483	4,818
Maine	2	2,746	--	198	541	188	5	219	254	229	--	5	2,756	--	215
New Hampshire	1	2,408	--	405	753	276	--	--	595	319	--	--	2,439	--	489
Vermont	1	1,123	--	15	337	152	--	205	95	120	--	--	1,179	--	28
Massachusetts	13	23,189	192	2,586	5,110	2,288	229	2,335	1,998	2,275	23	521	23,676	197	2,569
Rhode Island	1	2,941	253	397	781	161	7	208	279	316	6	--	3,029	265	437
Connecticut	3	8,115	10	1,010	1,923	766	26	811	796	805	17	16	8,304	21	1,080
MIDDLE ATLANTIC	41	124,506	1,051	14,423	22,522	7,453	1,385	4,189	10,713	10,461	227	1,361	127,827	1,119	15,443
New York	21	77,907	1,051	8,267	14,578	4,924	674	2,893	6,462	6,890	190	811	80,363	1,119	8,673
New Jersey	3	11,592	--	1,514	3,008	1,109	288	1,296	1,077	1,184	37	315	11,942	--	1,660
Pennsylvania	17	35,007	--	4,642	4,936	1,420	423	--	3,174	2,387	--	235	35,522	--	5,110
EAST NORTH CENTRAL	48	85,669	498	12,683	22,155	7,272	2,531	9,018	8,603	7,705	177	3,012	88,582	768	12,943
Ohio	20	22,334	2	4,402	6,438	1,314	1,247	2,073	3,196	1,740	61	1,207	23,123	98	4,239
Indiana	6	8,983	--	581	1,440	340	11	103	687	771	22	5	9,131	--	636
Illinois	11	33,496	231	2,859	8,956	4,039	753	5,181	2,692	3,538	--	828	34,913	340	2,842
Michigan	8	18,950	265	4,119	3,718	773	389	657	1,362	1,467	65	410	19,428	330	4,495
Wisconsin	3	1,906	--	722	1,603	806	131	1,004	666	189	29	562	1,987	--	731
WEST NORTH CENTRAL	25	42,217	--	7,933	7,246	1,699	496	1,625	3,626	3,346	133	584	42,519	--	7,758
Minnesota	7	10,420	--	1,775	1,967	468	280	455	1,138	943	64	258	10,388	--	1,664
Iowa <sup>1</sup>	5	6,493	--	2,884	1,046	216	77	125	509	537	23	127	6,488	--	2,907
Missouri	5	12,251	--	1,215	1,848	489	5	225	1,054	860	12	4	12,386	--	1,267
North Dakota	1	2,053	--	216	373	89	--	94	165	144	6	--	2,078	--	244
South Dakota	1	1,570	--	52	391	130	--	296	36	150	--	--	1,613	--	48
Nebraska	3	4,381	--	552	740	178	2	282	214	283	6	2	4,420	--	646
Kansas	3	5,049	--	1,239	881	129	132	148	510	429	22	193	5,146	--	982
SOUTH ATLANTIC	24	56,330	233	8,753	12,442	4,247	1,803	3,997	5,718	4,725	31	1,194	58,473	265	9,405
Delaware	1	1,234	--	313	312	81	--	55	167	98	--	--	1,236	--	384
Maryland	4	7,167	229	1,139	1,415	520	232	341	867	519	9	61	7,443	263	1,199
Dist. of Columbia	1	6,248	--	369	1,082	312	--	517	361	419	3	--	6,337	--	374
Virginia	5	9,528	--	2,007	2,145	1,267	36	746	1,565	869	--	68	9,696	--	2,039
West Virginia	5	4,524	--	842	1,473	521	104	834	392	470	7	105	4,675	--	981
North Carolina	4	7,819	4	1,397	1,616	391	1,117	145	1,127	553	5	634	8,497	2	1,381
South Carolina	1	4,928	--	923	1,496	364	--	240	862	516	--	--	5,050	--	1,043
Georgia	1	9,018	--	1,218	1,903	548	--	1,051	--	902	--	--	9,367	--	1,367
Florida	2	5,864	--	545	1,000	243	314	68	377	379	7	326	6,172	--	637
EAST SOUTH CENTRAL	11	23,229	--	3,643	5,845	1,733	185	1,027	3,730	1,978	16	76	24,057	--	3,751
Kentucky	4	6,613	--	1,034	1,490	313	73	362	649	620	16	44	6,733	--	1,099
Tennessee	3	6,404	--	361	1,399	389	7	504	471	520	--	7	6,882	--	376
Alabama	2	5,816	--	846	1,491	584	25	145	1,355	404	--	25	6,045	--	788
Mississippi	2	4,396	--	1,402	1,465	447	80	16	1,255	434	--	--	4,597	--	1,488
WEST SOUTH CENTRAL	14	33,129	--	6,601	7,692	2,439	472	2,378	4,007	2,502	41	834	33,018	--	7,553
Arkansas	1	4,759	--	1,701	1,553	403	--	246	1,126	413	--	--	4,733	--	1,898
Louisiana	2	6,788	--	1,596	1,069	297	14	110	798	486	8	2	6,731	--	1,687
Oklahoma	4	7,408	--	553	1,240	649	6	344	547	575	2	40	7,437	--	911
Texas	7	14,174	--	2,751	3,830	1,090	452	1,678	1,536	1,028	31	792	14,175	--	3,057
MOUNTAIN	9	12,045	--	1,841	2,549	768	327	1,312	571	1,011	53	59	12,477	--	2,047
Montana	1	1,843	--	--	282	210	--	361	--	131	--	7	1,836	--	--
Idaho	2	1,088	--	150	302	81	9	146	53	122	6	11	1,078	--	214
Wyoming <sup>1</sup>	1	594	--	59	112	54	--	49	62	45	--	--	611	--	52
Colorado	1	4,718	--	554	645	161	318	110	176	413	19	41	4,918	--	719
New Mexico	1	977	--	629	216	12	--	147	--	67	27	--	1,019	--	574
Arizona	1	1,314	--	227	571	101	--	250	127	115	--	--	1,448	--	273
Utah	1	1,159	--	179	312	130	--	211	102	84	--	--	1,208	--	175
Nevada	1	352	--	43	109	19	--	38	51	34	1	--	359	--	40
PACIFIC	14	39,325	--	8,405	11,322	2,854	3,028	3,570	5,013	3,829	46	3,038	41,164	--	7,274
Washington	3	6,741	--	897	1,626	402	24	335	817	721	23	38	6,918	--	838
Oregon	2	2,040	--	853	1,152	335	10	440	370	459	23	25	4,130	--	943
California	9	27,544	--	6,655	8,544	2,117	2,994	2,795	3,826	2,649	--	2,975	30,116	--	5,493

<sup>1</sup>Patients in Iowa county homes are included in State hospital statistics as patients in "other extra-mural care".



*Comparability of statistics.*--Statistics based on State hospital data must be interpreted with caution due to limitations of reporting, such as variations in coverage from year to year and the limited scope of the data requested. Although from a bookkeeping point of view, data on movement, for instance, have been considered adequate, if not completely satisfactory, for the purposes of most users, it is obvious that the time has come when a concerted effort must be made to increase both the scope of the information sought in the Census and the completeness of coverage and to improve the calibre of reporting.

It should be borne in mind that in States such as Wisconsin and New Jersey, with a system of county mental hospitals designed to accept people who, in other States, would normally be admitted to State mental hospitals, data pertaining to average daily resident-patient population and other categories of movement in State hospitals are not strictly comparable to those in other States. However, in Iowa, because of the relationship between State and county hospitals, all patients in county hospitals are considered as in "other extramural care" and carried as such in the State hospital data. In similar fashion, the presence in a State of large private hospitals such as Brattleboro Retreat in Vermont or of Federal facilities for mentally ill veterans may decrease the number of admissions to the State hospitals and, hence, the need for State facilities.

*Coverage.*--The statistics presented here are provisional, covering either the calendar year or the fiscal year ending in the calendar year and are based on data furnished to the National Institute of Mental Health on annual census schedules by the individual hospitals or appropriate State mental health boards.

All 207 State hospitals (including 8 Ohio receiving hospitals) submitted movement schedules for 1948 showing a total of 101,218 first admissions, 469,500 resident patients at the end of the year, and an average daily resident patient population of 463,496 persons. Schedules of first admissions by age and diagnosis were submitted by 178 hospitals with 91.2 percent of the total first admissions; schedules of administrative staff and of expenditures by 200 hospitals. The hospitals reporting staff and expenditures data accounted for 99.0 percent of the average daily resident population.

*Movement of population.*--Table 1 shows the movement of population in State mental hospitals for the United States, by Division and State; due to limitations of space certain totals have been eliminated. Statistics on

the movement of population which present a formal accounting of the flow of patients in or out of institutions during the course of a year, involve four major categories: (1) patients on books at the beginning of the year, (2) all admissions, (3) all separations, (4) patients on books at the end of year. For any year the number of patients on the books at the beginning of the year plus the total number of admissions should equal the sum of all separations during the year plus the number of patients on the books at the end of the year.

Over 600,000 persons were reported as on the books of State hospitals for mental disease throughout the country during 1948. In view of the fact that there is some duplication in the data when the same individual in the course of the year is admitted to more than one hospital or to the same hospital two or more times the reported 671,110 patient transactions represented an overstatement for the 207 reporting hospitals.

Data reported in table 1 have certain limitations. For example, first admission figures undoubtedly include an unknown number of patients who have received hospitalization in a mental institution previously. Review of transfer and extramural care data indicate that studies of interstate variations in definitions of such movement categories are necessary. In States where private hospitals do not report to a central State authority, it is not known to what extent transfers represent movement of patients from one hospital to another within the same system or represent a true gain or loss of patient population.

Table 2 presents the basic data and summary rates per 100,000 population for 1948 for first admissions, patients on the books during the year, and resident patients at the end of the year. The corresponding rates for 1947 are shown. Since most admissions to public hospitals for mental disease are to State mental hospitals, and since admissions to these hospitals are limited, in general, to residents of the respective States, the statistics here presented may be of aid in making crude interstate comparisons.

Some 469,500 persons or 323.1 per 100,000 population remained as resident patients in these hospitals at the end of the year. It is interesting to note that during the year the number of resident patients remaining in State mental hospitals increased by about 3 percent over the 455,972 persons in these hospitals at the beginning of the year.

For the country as a whole it may be noted that, between 1947 and 1948, there was a 6

TABLE 2.--SUMMARY DATA FOR MOVEMENT OF POPULATION, IN STATE HOSPITALS FOR MENTAL DISEASE, BY DIVISION AND STATE, 1948, WITH RATES, 1948 AND 1947

(1948 statistics based on reports from 199 State and 8 Ohio receiving hospitals; 1947 statistics based on reports from 196 State and 6 Ohio receiving hospitals)

DIVISION AND STATE	MOVEMENT OF POPULATION: 1948						RATE PER 100,000 POPULATION <sup>1</sup>					
	Patients on books at beginning of year	First admissions	Re-admissions	All discharges	Deaths in hospital	Patients on books at end of year	First admissions		On books during year <sup>2</sup>		Resident patients at end of year	
							1948	1947	1948	1947	1948	1947
UNITED STATES	527,102	101,218	32,296	76,892	39,621	543,127	69.7	65.7	461.9	452.0	323.1	316.9
NEW ENGLAND	45,588	9,445	3,831	7,795	4,064	46,684	101.9	91.9	637.9	630.1	446.4	444.4
Maine	2,944	541	188	473	229	2,971	60.3	64.8	410.0	407.5	307.2	310.6
New Hampshire	2,813	753	276	595	319	2,928	138.2	124.1	705.0	683.2	447.5	453.5
Vermont	1,138	337	152	300	120	1,207	90.1	73.4	435.0	415.9	315.2	307.7
Massachusetts	25,967	5,110	2,288	4,333	2,275	26,442	108.6	98.3	714.2	704.3	503.3	501.6
Rhode Island	3,591	781	161	487	316	3,731	105.3	75.8	611.9	596.6	408.2	394.3
Connecticut	9,135	1,923	766	1,607	805	9,405	95.8	89.9	590.1	594.1	413.5	411.9
MIDDLE ATLANTIC	139,980	22,522	7,453	14,902	10,461	144,389	75.8	70.9	576.5	574.0	430.1	426.1
New York	87,225	14,578	4,924	9,355	6,890	90,155	101.5	95.1	748.1	739.4	559.7	551.0
New Jersey	13,106	3,008	1,109	2,373	1,184	13,602	64.1	57.5	373.3	371.5	254.6	253.0
Pennsylvania	39,649	4,936	1,420	3,174	2,387	40,632	46.2	44.1	434.9	439.6	332.7	333.5
EAST NORTH CENTRAL	98,850	22,155	7,272	17,621	7,705	102,293	74.3	66.4	438.8	429.4	297.1	293.7
Ohio	26,738	6,438	1,314	5,269	1,740	27,458	82.7	77.4	458.9	451.9	296.9	291.3
Indiana	9,564	1,440	340	790	771	9,767	36.9	34.3	290.6	293.1	233.7	234.3
Illinois	36,586	8,956	4,039	7,873	3,538	38,095	103.9	88.9	583.8	559.8	404.9	400.4
Michigan	23,334	3,718	773	2,019	1,467	24,253	60.1	53.5	455.9	446.8	313.9	312.8
Wisconsin	2,628	1,603	806	1,670	189	2,718	48.5	44.7	156.3	168.7	60.1	58.7
WEST NORTH CENTRAL	50,150	7,246	1,699	5,251	3,346	50,277	52.0	47.8	427.6	389.4	305.1	283.6
Minnesota	12,195	1,967	468	1,593	943	12,052	67.0	68.4	507.5	528.6	353.6	360.8
Iowa	9,377	1,046	216	634	537	9,395	39.9	37.6	408.4	340.9	247.3	251.5
Missouri	13,466	1,848	489	1,279	860	13,653	46.8	38.5	400.7	300.2	314.0	226.5
North Dakota	2,269	373	89	259	144	2,322	66.7	60.1	488.6	488.7	371.7	379.5
South Dakota	1,622	391	130	332	150	1,661	63.1	59.0	345.6	365.0	260.2	273.0
Nebraska	4,933	740	178	496	283	5,066	57.1	56.6	451.3	448.4	340.8	341.7
Kansas	6,288	881	129	658	429	6,128	45.1	36.6	380.4	366.9	263.5	263.9
SOUTH ATLANTIC	65,316	12,442	4,247	9,715	4,725	68,143	64.7	65.2	435.8	428.8	304.1	295.7
Delaware	1,547	312	81	222	98	1,620	105.1	99.7	653.2	426.2	416.2	425.5
Maryland	8,535	1,415	520	1,208	519	8,905	66.8	62.2	505.3	492.7	351.4	339.6
Dist. of Columbia	6,617	1,082	312	878	419	6,711	124.8	132.6	924.0	950.5	730.9	751.9
Virginia	11,535	2,145	1,267	2,311	869	11,735	72.1	72.6	503.6	517.7	325.9	322.4
West Virginia	5,366	1,473	521	1,226	470	5,656	76.9	75.3	389.8	394.6	244.1	240.7
North Carolina	9,220	1,616	391	1,272	553	9,800	44.0	45.3	335.9	311.7	231.2	213.6
South Carolina	5,851	1,496	364	1,102	516	6,093	76.3	66.7	393.4	382.0	257.7	255.5
Georgia	10,236	1,903	548	1,051	902	10,734	61.3	51.3	408.7	388.8	301.1	289.6
Florida	6,409	1,000	243	445	379	6,809	43.1	70.5	343.4	347.2	266.0	257.2
EAST SOUTH CENTRAL	26,872	5,845	1,733	4,757	1,978	27,808	53.7	52.4	318.2	314.2	221.1	216.8
Kentucky	7,647	1,490	313	1,011	620	7,832	53.3	53.4	341.0	349.1	241.1	239.5
Tennessee	6,765	1,399	389	975	520	7,058	44.6	41.4	272.6	266.8	218.2	210.6
Alabama	6,662	1,491	584	1,500	404	6,833	52.5	52.2	308.6	301.8	212.9	205.7
Mississippi	5,798	1,465	447	1,271	434	6,085	69.4	67.8	368.8	355.1	217.7	210.6
WEST SOUTH CENTRAL	39,730	7,692	2,439	6,385	2,502	40,571	55.0	53.7	359.7	353.9	235.9	237.1
Arkansas	6,460	1,553	403	1,372	413	6,631	80.8	79.3	437.6	452.4	246.1	248.9
Louisiana	8,384	1,069	297	908	486	8,360	41.7	53.5	380.5	388.8	260.1	267.8
Oklahoma	7,961	1,240	649	891	575	8,348	52.7	57.5	419.0	436.9	316.2	324.5
Texas	16,925	3,830	1,090	3,214	1,028	17,232	53.5	45.5	311.7	287.7	198.2	194.6
MOUNTAIN	13,886	2,549	768	1,883	1,011	14,524	57.1	53.5	392.3	383.1	278.3	276.8
Montana	1,843	282	210	1,836	131	1,836	55.4	50.3	458.7	461.8	360.7	378.4
Idaho	1,238	302	81	199	122	1,292	57.0	42.5	307.5	287.4	203.4	207.4
Wyoming	653	112	54	111	45	663	41.5	43.5	303.3	316.2	226.3	228.5
Colorado	5,272	645	161	563	413	5,637	56.0	56.3	555.7	536.4	427.3	418.6
New Mexico	1,406	216	12	147	67	1,593	38.5	40.0	326.9	331.0	181.6	181.4
Arizona	1,541	571	101	377	115	1,721	87.3	71.7	338.4	313.2	221.4	206.3
Utah	1,338	312	130	313	84	1,383	47.9	49.2	273.0	271.8	185.3	181.7
Nevada	395	109	19	89	34	399	77.3	90.6	370.9	384.2	254.6	253.2
PACIFIC	46,730	11,322	2,854	8,583	3,829	48,438	81.0	80.7	457.6	444.4	294.6	282.8
Washington	7,638	1,626	402	1,152	721	7,756	66.3	64.1	395.0	421.8	282.0	290.7
Oregon	4,893	1,152	335	810	459	5,073	70.9	76.9	393.2	427.3	254.2	261.7
California	34,199	8,544	2,117	6,621	2,649	35,609	86.4	85.2	483.7	452.5	304.4	284.3

<sup>1</sup>Estimated civilian population as of July 1, for the corresponding year. Source: Series P-25, Nos. 12 and 14, Department of Commerce, Bureau of Census.

<sup>2</sup>Patients on books during the year comprises patients on books at beginning of year and all admissions including transfers.

TABLE 3.--FIRST ADMISSIONS TO STATE HOSPITALS FOR MENTAL DISEASE, BY AGE AND SEX,  
FOR THE UNITED STATES, 1948, WITH RATES FOR 1948 AND 1947

(1948 statistics based on reports from 199 State and 8 Ohio receiving hospitals;  
1947 statistics based on reports from 196 State and 6 Ohio receiving hospitals)

AGE	FIRST ADMISSIONS: 1948	PERCENT DISTRIBUTION OF TOTAL FIRST ADMISSIONS			RATE PER 100,000 <sup>1</sup> CIVILIAN POPULATION					
		Total	Male	Female	1948			1947		
					Total	Male	Female	Total	Male	Female
All Ages		101,218	54,698	46,520	100.0	100.0	100.0	69.7	76.3	63.2
Under 15 years		888	542	346	1.0	1.0	1.1	2.3	2.7	1.8
15 to 19 years		3,447	2,002	1,445	3.7	4.0	3.2	32.3	38.1	26.6
20 to 24 years		5,802	3,112	2,690	6.3	6.3	6.3	50.0	55.7	44.7
25 to 29 years		7,003	3,443	3,560	7.6	7.5	7.5	59.6	61.2	58.2
30 to 34 years		7,923	3,862	4,061	8.6	8.8	8.8	71.5	72.9	70.2
35 to 39 years		8,767	4,750	4,017	9.5	9.7	9.2	82.8	82.2	73.9
40 to 44 years		8,292	4,755	3,537	9.0	8.7	85.2	99.3	91.6	82.0
45 to 49 years		7,379	4,148	3,231	8.0	7.9	82.7	94.1	91.7	81.7
50 to 54 years		6,513	3,455	3,058	7.0	6.9	80.8	86.1	86.1	75.5
55 to 59 years		5,872	3,302	2,570	6.4	6.2	81.4	91.3	91.3	78.8
60 to 64 years		5,867	3,409	2,458	6.3	6.4	100.3	116.3	116.3	84.2
65 to 69 years		6,112	3,598	2,514	6.6	6.4	140.6	168.6	168.6	113.6
70 and over		18,465	9,479	8,986	20.0	20.1	279.7	308.1	308.1	254.9
Not reported <sup>2</sup>		8,888	4,841	4,047	--	--	--	--	--	--
Median age		47.7	48.0	47.4	--	--	--	--	--	--

<sup>1</sup>Estimated civilian population as of July 1, for the corresponding year. Source: Series P-25, No. 21, Department of Commerce, Bureau of Census.

<sup>2</sup>Not reported includes (a) first admissions shown on age and diagnosis schedules, but by age only and not by diagnosis (b) first admissions on movement schedules of hospitals not submitting schedules of first admissions by age and diagnosis (c) diagnosed first admissions with unknown age.



TABLE 4.--FIRST ADMISSIONS TO STATE HOSPITALS FOR MENTAL DISEASE, BY MENTAL DISORDER AND SEX, FOR THE UNITED STATES, 1948, WITH PERCENTS AND RATES: 1948 AND 1947

(1948 statistics based on reports from 199 State and 8 Ohio receiving hospitals; 1947 statistics based on reports from 196 State and 6 Ohio receiving hospitals)

MENTAL DISORDER	NUMBER			PERCENT DISTRIBUTION OF TOTAL FIRST ADMISSIONS		RATE PER 100,000 POPULATION <sup>1</sup>					
	1948					1948			1947		
	Total	Male	Female	1948	1947	Total	Male	Female	Total	Male	Female
Total patients	101,218	54,698	46,520	100.0	100.0	69.7	76.3	63.2	65.7	70.3	61.2
With psychosis	76,653	39,197	37,456	83.0	83.7	52.8	54.6	51.1	53.5	54.6	52.4
General paresis	4,121	2,947	1,174	4.5	5.4	2.8	4.1	1.6	3.4	4.9	2.0
With other forms of syphilis of the C. N. S.	658	440	218	0.7	0.7	0.5	0.6	0.3	0.4	0.6	0.3
With epidemic encephalitis	158	101	57	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
With other infectious diseases	186	90	96	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1
Alcoholic	4,611	3,747	864	5.0	4.5	3.2	5.2	1.2	2.9	4.7	1.1
Due to drugs and other exogenous poisons	397	192	205	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Traumatic	466	401	65	0.5	0.5	0.3	0.6	0.1	0.3	0.5	0.1
With cerebral arteriosclerosis	14,458	8,046	6,412	15.7	15.8	10.0	11.2	8.7	10.1	11.3	8.9
With other disturbances of circulation	585	366	219	0.6	0.7	0.4	0.5	0.3	0.5	0.5	0.4
With convulsive disorders	1,498	858	640	1.6	1.5	1.0	1.2	0.9	0.9	1.1	0.8
Senile	11,504	5,420	6,084	12.5	12.1	7.9	7.6	8.3	7.7	7.4	8.1
Involutional psychoses	4,188	1,131	3,057	4.5	4.7	2.9	1.6	4.2	3.0	1.6	4.3
Due to other metabolic, etc., diseases	656	285	371	0.7	0.8	0.5	0.4	0.5	0.5	0.4	0.6
Due to new growth	170	100	70	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1
With organic changes of the nervous system	1,061	593	468	1.1	1.0	0.7	0.8	0.6	0.7	0.8	0.5
Manic-depressive	5,633	2,055	3,578	6.1	7.2	3.9	2.9	4.9	4.	3.1	6.0
Dementia praecox (schizophrenia)	19,290	8,483	10,807	20.9	20.5	13.3	11.8	14.7	13.1	11.4	14.7
Paranoia and paranoid conditions	1,024	513	511	1.1	1.2	0.7	0.7	0.7	0.8	0.8	0.8
With psychopathic personality	911	611	300	1.0	1.0	0.6	0.9	0.4	0.6	0.9	0.4
With mental deficiency	2,377	1,287	1,090	2.6	2.6	1.6	1.8	1.5	1.7	1.8	1.6
Other, undiagnosed, and unknown	2,701	1,531	1,170	2.9	2.5	1.9	2.1	1.6	1.6	2.0	1.2
Psychoneuroses	3,772	1,550	2,222	4.1	3.7	2.6	2.2	3.0	2.3	1.9	2.8
Without psychosis	11,905	9,030	2,875	12.9	12.4	8.2	12.6	3.9	7.9	11.7	4.4
Epilepsy	353	210	143	0.4	0.3	0.2	0.3	0.2	0.2	0.3	0.2
Mental deficiency	1,244	773	471	1.3	1.6	0.9	1.1	0.6	1.0	1.2	0.8
Alcoholism	5,679	4,769	910	6.2	5.2	3.9	6.7	1.2	3.3	5.6	1.1
Drug addiction	389	195	194	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Personality disorders due to epidemic encephalitis	48	33	15	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0
Psychopathic personality	1,209	940	269	1.3	1.5	0.8	1.3	0.4	0.9	1.4	0.5
Primary behavior disorders	548	363	185	0.6	0.7	0.4	0.5	0.3	0.4	0.6	0.3
Other, unclassified, and unknown	2,435	1,747	688	2.6	2.6	1.7	2.4	0.9	1.7	2.2	1.2
Mental disorder not reported <sup>2</sup>	8,888	4,921	3,967	--	--	--	--	--	--	--	--

<sup>1</sup>Estimated civilian population as of July 1, for the corresponding year. Source: Series P-25, No. 21, Department of Commerce, Bureau of Census.

<sup>2</sup>Mental disorder not reported includes (a) first admissions shown on age and diagnosis schedules, but by age only and not by diagnosis (b) first admissions on movement schedules of hospitals not submitting schedules of first admissions by age and diagnosis.

percent increase in the first admission rate, a 2 percent increase in the rate for patients on the books during the year, and a 2 percent increase in rates pertaining to resident patients at the end of the year. These increases must be interpreted with caution since availability of hospital facilities, increase in medical, nursing and attendant personnel, as well as other factors, often exercise greater influence over these rates than true changes, if any, in the incidence and prevalence of hospitalizable mental disorders in the popu-

lation. It is well to remember, moreover, that just as a new therapeutic measure or a change in discharge policy may account for a sharp drop in resident patients at the end of the year in a given State, so may an increase in resident patients in another State be due to the availability of additional hospital facilities as well as to a real increase in incidence and prevalence. In other words, whatever changes occur may be due to any of a number of causes acting singly or in combination and it is difficult to determine the relative

effect of each such cause.

*First admissions by age and sex.*--In table 3 are shown the number of first admissions by age and sex, 1948, and the corresponding percents and rates per 100,000 population, 1948 and 1947. There was very little difference between the percent distribution for the two years. Almost one-third of the first admissions occurred in individuals 60 years of age and over. In 1948, first admission rates for males exceeded those for females in every age group. This was true for 1947 except for the age group 25-34 years. The rate for both sexes, with few exceptions, increased steadily with age, showing a marked spurt after age 60.

*First admissions by diagnosis, age and sex.*--Table 4 presents the number of first admissions to State mental hospitals by diagnosis and sex, 1948, and the respective percents and rates per 100,000 population for 1948 and 1947. The percent distribution of mental disorders appears to show little change in the two years under consideration. In males, as well as in females, patients diagnosed as psychotic accounted for over 80 percent of all diagnosed first admissions. The diagnosis of dementia praecox was reported in about 20 percent of these admissions, psychosis with cerebral arteriosclerosis in 16 percent, senile psychosis in 13 percent, and manic-depressive psychosis in 6 percent. Thus, these four diagnoses accounted for more than half of all diagnosed first admissions.

Among the psychoses, the following diagnoses showed markedly higher rates for males than for females: general paresis, psychosis with other forms of syphilis of the central nervous system, alcoholic psychosis, psychosis due to trauma, and psychosis with psychopathic personality. As was to be expected, the female rates were distinctly higher for the involutional psychoses. These findings were also in evidence in 1947 rates.

Table 5 gives age specific first admission rates, by diagnosis, to State mental hospitals in 1948. These data are shown graphically in figure 2. It is evident that in the age group 15-49 years dementia praecox showed the highest age specific first admission rates. For the next several years of age the involutional psychoses predominated. From age 60 on a sharp increase in the first admission rate of mental diseases of the senium accounted for the markedly increased total first admission rates. The probability of being hospitalized with a mental disease was far greater after age 60 than at any other period of life. The peak age specific rates for all mental disorders combined, excluding mental diseases of the

senium, was reached at 40-44 years and dropped thereafter to the end of the life span.

*Administrative statistics.*--Comparative statistics for 1948 and 1947 for State mental hospitals on overcrowding, expenditures, and administrative staff are reported in tables 6, 7 and 8 respectively.

*Overcrowding.*--Although the number of beds provided for patients in these hospitals has been constantly increasing, the demand for these beds has most often exceeded the supply. New facilities are filled almost as rapidly as they are completed. As a consequence, in a great number of States, overcrowding is a common phenomenon. In table 6 the degree of overcrowding in these hospitals is measured by the excess of average daily resident-patient population over rated capacity, expressed as a percentage of rated capacity. The average daily resident-patient population is taken as a crude measure of the number of beds provided. It should be noted that the definition of rated capacity varies from State to State and probably within the same State at different times. In 1948, the degree of overcrowding in State hospitals for mental disease in the United States was 18.2 percent as compared to 16.7 percent in 1947. In 1948, as well as in 1947, it was greatest in Arizona, Louisiana and Illinois where the average daily resident population in State hospitals was about one and a half times their rated capacity. On the other hand, a number of States, seven in 1947 and six in 1948, reported a rated capacity greater than their average daily resident-patient population. There is no inference that more bed space or more adequate facilities were provided in these States than elsewhere. Table 6 also shows the average daily resident-patients per 1,000 population for the years under consideration.

*Administrative staff.*--The adequacy of care received by patients in any hospital largely depends upon the relationship between the number and type of well trained personnel and the number of patients under care. This relationship may be crudely expressed in terms of the average number of patients served by each full-time employee. The variation from hospital to hospital, however, in the number of employees not directly associated with patient care, such as farm workers, etc., would affect the meaningfulness of such ratios. The number and type of personnel on duty in State mental hospitals for the United States, by Division and State, in 1948 are shown in table 7 together with the ratio of patients to full-time employees. For comparative purposes there are included similar ratios for 1947. It should be noted that the ratio of patients to

TABLE 5.--RATE OF FIRST ADMISSIONS TO STATE HOSPITALS FOR MENTAL DISEASE BY AGE AND MENTAL DISORDER.  
FOR THE UNITED STATES: 1948

(Statistics based on reports from 199 State and 8 Ohio receiving hospitals)

MENTAL DISORDER	RATE PER 100,000 <sup>1</sup>														
	All ages	Under 15 years	15 to 24 years	25 to 44 years	45 to 64 years	65 to 74 years	75 to 84 years	85 to 94 years	95 to 104 years	105 to 114 years	115 to 124 years	125 to 134 years	135 to 144 years	145 to 154 years	70 and over
All patients	69.7	2.3	32.3	50.0	59.6	71.5	82.8	85.2	82.7	80.8	81.4	100.3	140.6	279.7	
With psychosis	43.5	0.7	22.8	37.6	45.1	54.2	60.0	62.9	65.2	65.2	69.3	89.9	132.1	273.3	
General paresis	2.8	0.0	0.3	0.4	0.7	2.3	5.6	7.8	8.3	6.5	6.0	5.4	4.5	1.7	
With other forms of syphilis of the C.N.S.	0.4	0.0	0.1	0.1	0.2	0.5	0.7	1.0	1.1	1.0	1.0	0.9	0.9	0.4	
With epidemic encephalitis	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	--	
With other infectious diseases	0.1	0.0	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	
Alcoholic	3.2	--	0.1	0.8	2.0	4.0	7.0	8.6	7.3	7.2	6.6	5.2	3.6	1.0	
Due to drugs and other exogenous poisons	0.3	0.0	0.0	0.1	0.2	0.4	0.6	0.6	0.6	0.5	0.6	0.5	0.3	0.2	
Traumatic	0.3	0.0	0.1	0.2	0.3	0.2	0.5	0.6	0.5	0.6	0.8	0.6	0.5	0.4	
With cerebral arteriosclerosis	10.0	--	--	--	--	--	--	0.7	2.0	5.3	13.6	36.2	69.4	114.7	
With other disturbances of circulation	0.4	--	0.0	0.0	0.0	0.1	0.1	0.4	0.7	0.9	1.3	1.6	1.7	1.8	
With convulsive disorders	1.0	0.1	1.3	1.9	1.7	1.8	1.7	1.4	1.2	1.0	0.9	0.8	0.6	0.8	
Senile	7.9	--	--	--	--	--	--	--	--	0.1	0.6	1.8	9.7	28.5	142.4
Involutional psychoses	0.4	--	0.0	0.0	0.0	0.1	0.9	4.7	10.2	14.1	11.5	8.6	4.4	0.6	
Due to other metabolic, etc., diseases	0.4	0.0	0.1	0.2	0.2	0.2	0.4	0.5	0.7	1.1	1.5	1.6	1.2	0.9	
Due to new growth	0.1	--	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.2	0.3	0.3	0.3	0.4	
With organic changes of the nervous system	0.7	0.0	0.2	0.3	0.3	0.6	0.9	1.0	1.4	1.5	2.1	2.2	2.3	1.0	
Manic-depressive	3.9	0.0	1.4	3.0	4.6	6.8	8.0	7.8	7.1	6.9	6.2	5.2	4.3	1.3	
Dementia praecox (schizophrenia)	13.3	0.3	13.9	24.7	28.1	30.2	26.4	19.9	16.3	11.0	7.6	4.8	3.0	1.2	
Paranoia and paranoid conditions	0.7	0.0	0.1	0.1	0.4	0.6	0.9	1.4	1.6	2.1	2.0	1.6	1.4	0.5	
With psychopathic personality	0.6	0.0	1.2	1.4	1.3	1.1	0.8	0.8	0.7	0.4	0.3	0.1	0.3	0.1	
With mental deficiency	1.6	0.2	2.9	2.9	3.0	2.7	2.4	1.8	1.5	1.2	1.0	0.6	0.2	0.2	
Other, undiagnosed, and unknown	1.8	0.1	1.0	1.3	1.9	2.2	2.5	2.8	2.9	2.9	3.6	3.3	4.1	3.6	
Psychoneuroses	2.6	0.1	1.6	3.2	4.2	5.1	5.6	4.6	3.4	3.1	3.0	2.8	2.2	0.8	
Without psychosis	8.0	1.1	7.4	8.4	9.5	11.8	16.4	17.3	13.5	11.3	8.6	7.0	5.7	4.7	
Epilepsy	0.2	0.1	0.6	0.5	0.4	0.3	0.4	0.2	0.2	0.1	0.1	0.1	--	0.0	
Mental deficiency	0.8	0.3	2.0	1.8	1.4	0.9	1.1	0.8	0.8	0.6	0.6	0.4	0.2	0.1	
Alcoholism	3.9	0.0	0.1	1.1	3.2	6.6	10.5	11.6	9.2	7.6	5.0	3.8	2.6	0.9	
Drug addiction	0.2	--	0.0	0.1	0.2	0.4	0.5	0.8	0.5	0.6	0.3	0.2	0.4	0.2	
Personality disorders due to epidemic encephalitis	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	--	--	
Psychopathic personality	0.8	0.0	2.1	2.1	1.9	1.4	1.2	0.9	0.6	0.3	0.3	0.2	0.2	0.1	
Primary behavior disorders	0.4	0.6	1.3	0.4	0.3	0.2	0.2	0.1	0.0	0.1	0.2	0.1	--	0.0	
Other, unclassified, and unknown	1.7	0.1	1.3	2.4	2.1	2.0	2.4	2.8	2.1	2.0	2.1	2.2	2.3	3.4	

<sup>1</sup>Estimated civilian population as of July 1, 1948. Source: Series P-25, No. 21, Department of Commerce, Bureau of the Census.

total employees is not as meaningful as the ratio of patients to employees of specific occupational groups. Thus hospitals really tending to fulfill a therapeutic function may differ markedly in their patient-physician ratio from those where the major emphasis appears to be on custody. For the country as a whole the need for full-time physicians in State mental hospitals was about 47 percent met, based on 1941 standards approved by the APA<sup>1</sup>. The deficiencies in personnel are and have been most severe in physicians, clinical psychologists, psychiatric social workers, nursing personnel, attendants and other specialized therapeutic workers.

**Expenditures.**--Table 8 presents statistics on expenditures classified by purpose of expenditure for State mental hospitals, and percent distribution of maintenance expenditures, by Division and State, for the year 1948 and per capita expenditures for maintenance for 1948 and 1947. The per capita expenditure for maintenance for State mental hospitals reporting such data for 1948 was \$659.13 com-

pared to \$547.84 in 1947. This was an overall increase of about 20 percent in per capita cost. There was considerable interstate variation reflecting in part geographical and fiscal year variation in the general price level and, in part, variations in the type and adequacy of care provided. The degree to which hospitals were self supporting by the production of their farms and their varying needs for such items as fuel, light and water were also reflected in their per capita maintenance expenditures. For the country as a whole, about 55 percent of the State mental hospitals maintenance dollar was spent for salaries and wages, 23 percent for purchased provisions, 6 percent for fuel, light and water and 16 percent for other items of maintenance. Here also there was considerable variation between States in the relative expenditures for various maintenance items. For example, 66 percent of Michigan's maintenance dollar was spent for salaries and wages while only 30 percent of Tennessee's dollar was spent for the same purpose.

<sup>1</sup>By these standards there would be, exclusive of the superintendent, one physician for every 200 resident patients and one physician for every 100 admissions during the year, excluding transfers.



# FIRST ADMISSION RATES FOR SELECTED DIAGNOSES, BY AGE, TO STATE HOSPITALS FOR MENTAL DISEASE, UNITED STATES, 1948

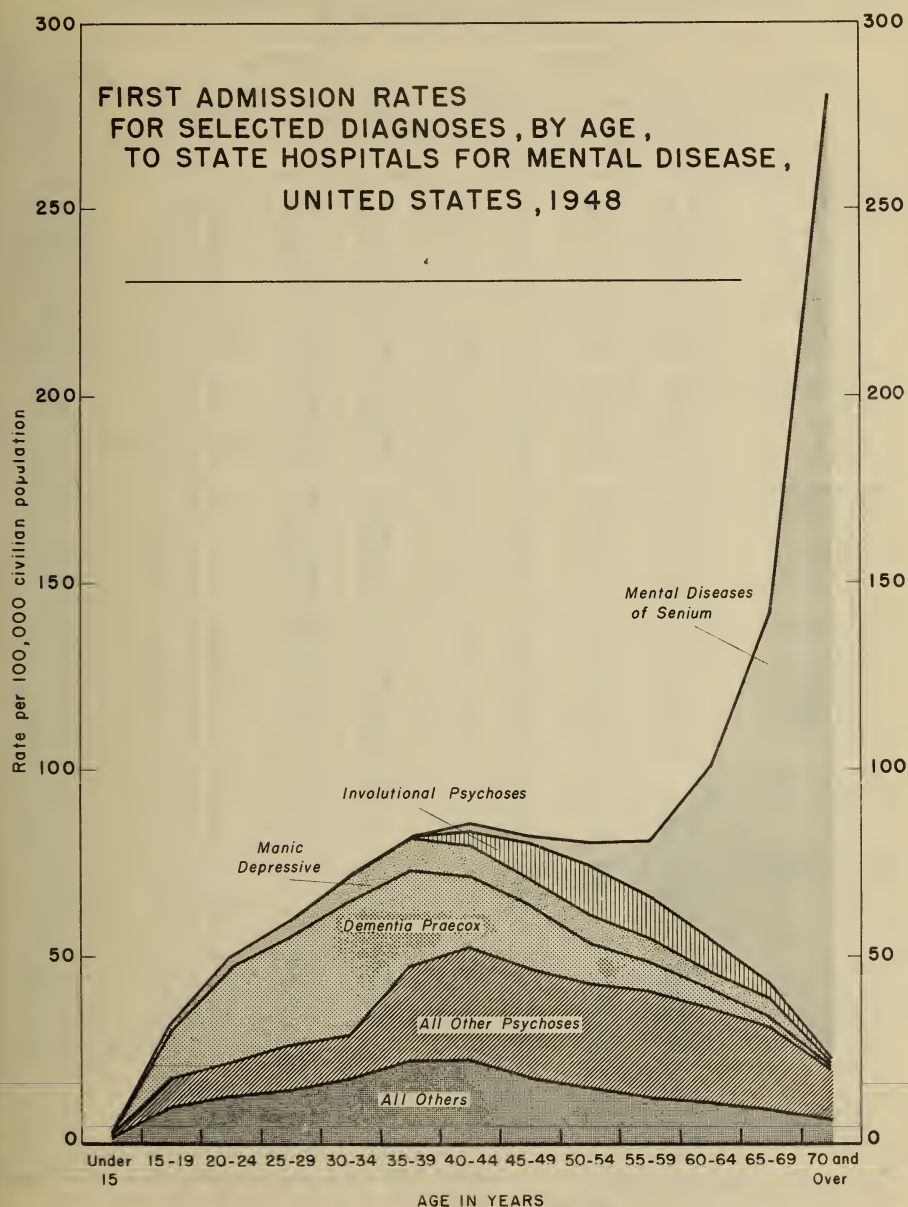


FIGURE 2



TABLE 6.--EXCESS OF AVERAGE DAILY RESIDENT-PATIENTS OVER RATED CAPACITY OF STATE HOSPITALS FOR MENTAL DISEASE, BY DIVISION AND STATE: 1948 AND 1947

(1948 statistics based on reports from 199 State and 8 Ohio receiving hospitals; 1947 statistics based on reports from 196 State and 6 Ohio receiving hospitals)

DIVISION AND STATE	OVERCROWDING: 1948				OVERCROWDING: 1947				AVERAGE DAILY RESIDENT-PATIENTS PER 1,000 CIVILIAN POPULATION <sup>1</sup>	
	Average daily resident patients	Rated capacity	Excess of population over capacity <sup>2</sup>		Average daily resident patients	Rated capacity	Excess of population over capacity <sup>2</sup>		1948	1947
			Number	Percent			Number	Percent		
UNITED STATES	463,496	392,224	71,272	18.2	450,216	385,635	64,581	16.7	3.2	3.2
NEW ENGLAND	40,952	34,722	6,230	17.9	40,626	34,416	6,210	18.0	4.4	4.5
Maine	2,760	2,207	553	25.1	2,701	2,159	542	25.1	3.1	3.1
New Hampshire	2,446	2,114	332	15.7	2,405	2,050	355	17.3	4.5	4.5
Vermont	1,147	858	289	33.7	1,104	858	246	28.7	3.1	3.0
Massachusetts	23,412	19,397	4,015	20.7	23,356	19,397	3,959	20.4	5.0	5.1
Rhode Island	3,009	2,700	309	11.4	2,970	2,700	270	10.0	4.1	4.0
Connecticut	8,178	7,446	732	9.8	8,090	7,252	838	11.6	4.1	4.1
MIDDLE ATLANTIC	126,272	101,849	24,423	24.0	124,772	101,899	22,373	22.0	4.2	4.3
New York	79,043	65,874	13,169	20.0	77,344	65,675	11,669	17.8	5.5	5.5
New Jersey	11,865	8,949	2,916	32.6	11,677	8,889	2,788	31.4	2.5	2.5
Pennsylvania	35,364	27,026	8,338	30.9	35,251	27,335	7,916	29.0	3.3	3.4
EAST NORTH CENTRAL	87,577	68,008	19,569	28.8	85,012	67,424	17,588	26.1	2.9	2.9
Ohio	22,898	20,099	2,799	13.9	22,086	19,649	2,437	12.4	2.9	2.9
Indiana	9,029	8,978	51	0.6	9,043	9,040	3	0.0	2.3	2.4
Illinois	34,171	21,932	12,239	55.8	32,974	21,902	11,072	50.6	4.0	3.9
Michigan	19,468	15,264	4,204	27.5	18,974	15,264	3,710	24.3	3.1	3.1
Wisconsin	2,011	1,735	276	15.9	1,935	1,569	366	23.3	0.6	0.6
WEST NORTH CENTRAL	42,747	39,416	3,331	8.5	39,051	37,535	1,516	4.0	3.1	2.9
Minnesota	10,411	10,404	7	0.1	10,493	10,365	128	1.2	3.5	3.6
Iowa	6,639	5,072	1,567	30.9	6,574	5,072	1,502	29.6	2.5	2.5
Missouri	12,359	10,662	1,697	15.9	8,900	8,898	2	0.0	3.1	2.3
North Dakota	2,054	2,000	54	2.7	2,046	2,000	46	2.3	3.7	3.8
South Dakota	1,650	1,888	-238	-12.6	1,636	1,888	-252	-13.3	2.7	2.8
Nebraska	4,403	4,386	17	0.4	4,338	4,356	-18	-0.4	3.4	3.4
Kansas	5,231	5,004	227	4.5	5,064	4,956	108	2.2	2.7	2.6
SOUTH ATLANTIC	57,604	52,732	4,872	9.2	55,693	51,007	4,686	9.2	3.0	2.9
Delaware	1,226	1,250	-24	-1.9	1,230	1,250	-20	-1.6	4.1	4.2
Maryland	7,260	5,755	1,505	26.2	7,104	6,322	782	12.4	3.4	3.4
District of Columbia	6,342	6,007	335	5.6	6,207	6,598	-391	-5.9	7.3	7.5
Virginia	9,616	8,300	1,316	15.9	9,669	8,300	1,369	15.8	3.2	3.3
West Virginia	4,558	3,789	769	20.3	4,485	3,670	815	22.2	2.4	2.4
North Carolina	8,410	9,413	-1,003	-10.7	7,578	7,423	155	2.1	2.3	2.1
South Carolina	4,980	4,855	125	2.6	4,842	4,652	190	4.1	2.5	2.5
Georgia	9,152	6,500	2,652	40.8	8,895	6,500	2,395	36.8	2.9	2.9
Florida	6,060	6,863	-803	-11.7	5,743	6,292	-549	-8.7	2.6	2.5
EAST SOUTH CENTRAL	23,430	21,450	1,980	9.2	22,940	21,400	1,540	7.2	2.2	2.1
Kentucky	6,720	6,300	420	6.7	6,612	6,300	312	5.0	2.4	2.4
Tennessee	6,343	5,600	743	13.3	6,268	5,550	718	12.9	2.0	2.0
Alabama	5,904	5,700	204	3.6	5,732	5,700	32	0.6	2.1	2.0
Mississippi	4,463	3,850	613	15.9	4,328	3,850	478	12.4	2.1	2.1
WEST SOUTH CENTRAL	33,270	28,882	4,388	15.2	32,969	29,984	2,985	10.0	2.4	2.4
Arkansas	4,766	4,200	566	13.5	4,770	4,759	11	0.2	2.5	2.5
Louisiana	6,964	4,661	2,303	49.4	6,895	4,361	2,534	58.1	2.7	2.7
Oklahoma	7,162	5,886	1,276	21.7	7,675	7,100	575	8.1	3.0	3.4
Texas	14,378	14,135	243	1.7	13,629	13,764	-135	-1.0	2.0	1.9
MOUNTAIN	12,315	10,601	1,714	16.2	11,985	10,224	1,761	17.2	2.8	2.8
Montana	1,847	1,957	-110	-5.6	1,831	1,500	331	22.1	3.6	3.8
Idaho	1,093	1,080	13	1.2	1,088	1,080	8	0.7	2.1	2.1
Wyoming	606	650	-44	-6.8	648	650	-2	-0.3	2.2	2.5
Colorado	4,842	3,758	1,084	28.8	4,662	3,758	904	24.0	4.2	4.1
New Mexico	976	920	56	6.1	975	1,000	-25	-2.5	1.7	1.8
Arizona	1,391	850	541	63.6	1,275	850	425	50.0	2.1	2.0
Utah	1,199	1,086	113	10.4	1,152	1,086	66	6.1	1.8	1.8
Nevada	361	300	61	20.3	354	300	54	18.0	2.6	2.5
PACIFIC	39,329	34,564	4,765	13.8	37,668	31,746	5,922	18.7	2.8	2.8
Washington	6,862	5,600	1,262	22.5	6,826	5,600	1,226	21.9	2.8	2.9
Oregon	4,047	3,610	437	12.1	4,046	3,610	436	12.1	2.5	2.6
California	28,420	25,354	3,066	12.1	26,796	22,536	4,260	18.9	2.9	2.8

<sup>1</sup>Based on average daily resident-patients and estimated civilian population as of July 1, for the corresponding year. Source: Series P-25, Nos. 12 and 14, Department of Commerce, Bureau of Census.

<sup>2</sup>A minus sign (-) denotes average daily population less than rated capacity.

TABLE 7.--ADMINISTRATIVE STAFF, FULL-TIME, BY OCCUPATION, 1948 AND RATIO OF PATIENTS TO TOTAL STAFF, 1948 AND 1947, STATE HOSPITALS FOR MENTAL DISEASE, BY DIVISION AND STATE

(1948 statistics based on reports from 192 State and 8 Ohio receiving hospitals; 1947 statistics based on reports from 187 State and 6 Ohio receiving hospitals)

DIVISION AND STATE	Total adminis- trative staff	Super- inten- dent	Physi- cians and internes	Graduate nurses	Other nurses and attendants	Psycholo- gists and Psychome- trists	Social workers and field workers	Other professional and semi- professional employees	All other employees	Average daily resident- patients	RATIO <sup>2</sup>	
											1948	1947
UNITED STATES	87,514	191	1,804	3,797	48,441	190	638	3,201	29,252	458,769	5.2	5.6
NEW ENGLAND	8,496	21	192	501	3,914	41	63	337	3,427	40,952	4.8	5.3
Maine	566	2	11	15	274	2	3	13	246	2,760	4.9	5.5
New Hampshire	616	1	10	49	274	3	6	24	249	2,446	4.0	3.6
Vermont	238	1	6	3	115	1	2	7	103	1,147	4.8	5.4
Massachusetts	4,675	13	101	294	2,127	15	35	196	1,894	23,412	5.0	5.5
Rhode Island	567	1	19	39	300	1	5	20	182	3,009	5.3	6.2
Connecticut	1,834	3	45	101	824	19	12	77	753	8,178	4.4	5.0
MIDDLE ATLANTIC	27,494	39	600	1,878	14,936	34	242	1,078	8,687	125,825	4.6	4.8
New York	18,224	21	413	1,309	10,403	17	169	716	5,176	79,043	4.3	4.6
New Jersey	2,936	4	66	174	1,282	5	35	123	1,247	11,865	4.0	4.3
Pennsylvania	6,334	14	121	395	3,251	12	38	239	2,264	34,917	5.5	5.8
EAST NORTH CENTRAL	16,962	40	340	565	9,263	64	210	718	5,762	86,785	5.1	5.5
Ohio	4,729	14	76	173	2,888	17	27	151	1,383	22,898	4.8	5.1
Indiana	1,367	5	29	11	748	1	4	30	539	8,700	6.4	8.1
Illinois	5,748	10	142	186	2,657	32	105	345	2,271	33,708	5.9	5.8
Michigan	4,528	8	81	163	2,646	14	72	174	1,370	19,468	4.3	5.1
Wisconsin	590	3	12	32	324	--	2	18	199	2,011	3.4	3.4
WEST NORTH CENTRAL	6,963	24	124	151	4,125	13	19	203	2,304	42,626	6.1	6.6
Minnesota	1,478	7	25	77	875	--	3	54	437	10,411	7.0	7.1
Iowa	1,094	4	23	11	574	4	8	40	430	6,518	6.0	6.6
Missouri	2,173	5	30	29	1,352	3	--	48	700	12,359	5.7	6.4
North Dakota	1	5	3	165	1	--	10	87	2,054	7,6	7.5	7.6
South Dakota	305	1	7	2	158	--	--	3	134	1,650	5.4	5.7
Nebraska	987	3	22	25	643	2	2	39	251	4,403	4.5	4.7
Kansas	654	3	12	4	358	3	--	9	265	5,231	8.0	9.0
SOUTH ATLANTIC	10,507	23	220	436	5,685	20	47	288	3,788	57,604	5.5	5.8
Delaware	271	1	8	16	129	5	4	32	76	1,226	4.5	6.1
Maryland	1,058	4	36	7	609	4	19	29	350	7,260	6.9	7.2
District of Columbia	2,474	1	75	267	1,199	3	9	50	870	6,342	2.6	2.6
Virginia	1,552	5	31	4	969	4	4	31	491	9,616	6.2	7.2
West Virginia	555	5	15	12	311	1	2	32	177	4,558	8.2	7.8
North Carolina	1,568	4	22	38	808	2	6	52	636	8,410	5.4	6.6
South Carolina	737	1	13	14	351	--	1	15	342	4,980	6.8	6.2
Georgia	1,088	1	18	26	674	--	1	20	348	9,152	8.4	8.7
Florida	1,204	1	16	25	635	1	1	27	498	6,060	5.0	5.0
EAST SOUTH CENTRAL	3,085	10	75	39	1,883	3	6	112	957	23,430	7.6	7.6
Kentucky	863	4	28	14	505	--	2	32	278	6,720	7.8	7.3
Tennessee	708	3	15	6	474	2	1	15	192	6,343	9.0	8.9
Alabama	810	1	14	9	527	1	--	29	229	5,904	7.3	7.6
Mississippi	704	2	18	10	377	--	3	36	258	4,463	6.3	6.8
WEST SOUTH CENTRAL	4,727	11	83	37	2,577	3	19	145	1,852	29,903	6.3	7.2
Arkansas	961	1	16	11	584	--	1	16	332	4,766	5.0	5.2
Louisiana	2,066	2	17	13	552	1	4	30	447	6,964	6.5	7.3
Oklahoma	1,042	4	20	7	610	1	2	32	366	7,162	6.9	8.4
Texas	1,658	4	30	6	831	1	12	67	707	11,011	6.6	7.7
MOUNTAIN	2,590	9	43	60	1,487	3	9	98	881	12,315	4.8	4.8
Montana	321	1	4	6	200	--	--	13	97	1,847	5.8	5.5
Idaho	174	2	5	7	90	2	2	8	58	1,093	6.3	6.7
Wyoming	94	1	4	1	53	--	--	2	33	606	6.4	7.2
Colorado	1,158	1	22	25	630	--	2	41	437	4,842	4.2	4.4
New Mexico	300	1	4	3	175	--	--	8	109	876	3.2	3.4
Arizona	254	1	4	7	146	--	3	17	76	1,391	5.5	4.8
Utah	230	1	3	6	158	--	2	8	52	1,199	5.2	5.0
Nevada	59	1	1	2	35	--	--	1	19	361	6.1	6.9
PACIFIC	6,690	14	127	130	4,571	9	23	222	1,594	39,329	5.9	7.1
Washington	1,265	3	29	36	749	4	8	32	404	6,862	5.4	5.9
Oregon	694	2	15	29	449	--	2	14	183	4,047	5.8	6.4
California	4,731	9	83	65	3,373	5	13	176	1,007	28,420	6.0	7.6

<sup>1</sup>Includes dentists, dental assistants, pharmacists, clinical assistants, laboratory and X-ray technicians, dietitians, therapists and assistants, principals of schools, teachers of grade and special subjects.

<sup>2</sup>Patients per full-time employee.

TABLE 8.--EXPENDITURES BY PURPOSE OF EXPENDITURE, 1948 AND PER CAPITA MAINTENANCE EXPENDITURES, 1948 AND 1947

(1948 statistics based on reports from 192 State and 8 Ohio receiving hospitals; 1947 statistics based on reports from 188 State and 6 Ohio receiving hospitals)

DIVISION, AND STATE	EXPENDITURES BY PURPOSE : 1948 (in thousands of dollars)							Additions, improvements and other expenditures
	Total	Expenditures for maintenance						
		Total	Salary and wages	Purchased provisions	Fuel, light and water	Other maintenance		
UNITED STATES	\$349,267.6	\$302,390.2	\$165,873.1	\$69,436.1	\$9,483.0	\$47,598.0	\$46,877.4	
NEW ENGLAND	29,785.7	28,101.9	15,514.7	6,009.8	2,395.7	4,181.7	1,683.8	
Maine	1,688.2	1,687.9	811.5	473.9	155.4	247.1	0.3	
New Hampshire	2,206.5	1,874.7	968.8	424.2	179.2	302.5	331.8	
Vermont	1,372.8	713.0	374.2	117.5	56.3	165.0	659.8	
Massachusetts	15,841.6	15,727.8	8,915.6	3,128.3	1,521.6	2,162.3	113.8	
Rhode Island	1,577.9	1,552.4	891.7	444.9	2.9	212.9	25.5	
Connecticut	7,098.7	6,546.1	3,552.9	1,421.0	480.3	1,091.9	552.6	
MIDDLE ATLANTIC	107,147.7	97,764.7	60,430.3	21,223.7	5,936.2	10,174.5	9,383.0	
New York	70,586.2	67,909.0	44,401.4	14,043.8	3,883.1	5,580.7	2,677.2	
New Jersey	8,666.4	8,464.1	5,070.6	1,676.6	565.3	1,151.6	202.3	
Pennsylvania	27,895.1	21,391.6	10,958.3	5,503.3	1,487.8	3,442.2	6,503.5	
EAST NORTH CENTRAL	74,310.2	62,922.7	33,350.7	13,053.0	4,354.3	12,164.7	11,387.5	
Ohio	18,726.7	14,531.6	7,989.8	3,254.6	1,309.7	1,977.5	4,195.1	
Indiana	3,892.7	3,520.4	1,493.2	802.1	332.9	892.2	372.3	
Illinois	30,785.1	26,575.1	11,838.1	6,170.1	1,750.5	6,816.4	4,210.0	
Michigan	18,930.5	16,470.2	10,879.6	2,517.0	815.5	2,221.9	2,460.3	
Wisconsin	1,975.2	1,825.4	1,150.0	273.0	145.7	256.7	149.8	
WEST NORTH CENTRAL	22,552.2	20,422.5	10,026.1	5,361.4	1,605.8	3,429.2	2,129.7	
Minnesota	5,150.5	4,800.1	2,776.8	912.5	354.4	756.4	350.4	
Iowa	3,566.0	3,225.5	1,552.4	850.4	271.0	551.7	340.5	
Missouri	6,651.3	6,056.5	2,723.6	1,720.6	567.0	1,045.3	594.8	
North Dakota	963.6	876.9	415.8	229.7	72.3	159.1	86.7	
South Dakota	708.6	708.6	325.3	207.7	63.5	112.1	--	
Nebraska	3,318.6	2,721.9	1,391.6	794.1	128.3	407.9	596.7	
Kansas	2,193.6	2,033.0	840.6	646.4	149.3	396.7	160.6	
SOUTH ATLANTIC	40,250.0	35,449.9	17,406.4	9,297.1	2,236.4	6,510.0	4,800.1	
Delaware	854.4	854.4	379.0	220.7	67.3	187.4	--	
Maryland	5,181.7	4,377.8	2,004.6	1,232.2	370.8	770.2	803.9	
District of Columbia	9,195.3	8,921.6	6,258.3	1,266.3	327.0	1,070.0	273.7	
Virginia	5,425.6	5,006.9	1,956.8	1,631.1	230.6	1,188.4	418.7	
West Virginia	2,338.6	1,842.0	768.4	540.3	98.7	434.6	496.6	
North Carolina	6,817.9	5,258.3	2,213.9	1,218.8	351.3	1,474.3	1,559.6	
South Carolina	2,430.2	2,430.2	883.5	956.3	153.6	436.8	--	
Georgia	3,726.8	3,171.9	1,211.8	1,052.7	328.4	579.0	554.9	
Florida	4,279.5	3,586.8	1,730.1	1,178.7	308.7	369.3	692.7	
EAST SOUTH CENTRAL	9,060.6	8,986.1	3,337.4	3,245.5	660.5	1,742.7	74.5	
Kentucky	2,661.5	2,637.7	1,132.2	1,049.8	267.8	187.9	23.8	
Tennessee	1,970.3	1,950.3	591.3	947.2	72.7	339.1	20.0	
Alabama	2,895.5	2,895.5	1,051.6	768.9	223.1	851.9	--	
Mississippi	1,533.3	1,502.6	562.3	479.6	96.9	363.8	30.7	
WEST SOUTH CENTRAL	14,261.6	12,921.4	4,790.8	4,184.8	528.8	3,417.0	1,340.2	
Arkansas	2,286.3	2,149.7	892.1	546.5	93.1	618.0	136.6	
Louisiana	2,643.7	2,603.5	1,038.1	798.8	102.3	664.3	40.2	
Oklahoma	4,061.4	3,405.5	1,063.4	1,146.3	153.3	1,042.5	675.9	
Texas	5,250.2	4,762.7	1,797.2	1,693.2	180.1	1,092.2	487.5	
MOUNTAIN	8,820.3	8,215.1	4,603.5	1,501.8	433.3	1,676.5	605.2	
Montana	1,253.9	1,042.4	531.1	380.5	35.1	95.7	211.5	
Idaho	651.4	604.3	300.5	111.5	55.4	136.9	47.1	
Wyoming	284.1	284.1	96.8	58.0	18.9	110.4	--	
Colorado	3,663.6	3,501.9	2,214.9	539.2	173.7	574.1	161.7	
New Mexico	824.5	740.4	361.6	170.1	54.4	154.3	84.1	
Arizona	1,189.5	1,095.3	548.0	144.6	44.0	358.7	94.2	
Utah	701.1	694.5	448.1	59.0	23.9	163.5	6.6	
Nevada	252.2	252.2	102.5	38.9	27.9	82.9	--	
PACIFIC	43,079.3	27,605.9	16,413.2	5,559.0	1,332.0	4,301.7	15,473.4	
Washington	6,928.4	4,674.1	2,665.1	1,324.0	318.3	366.7	2,254.3	
Oregon	5,419.5	2,122.1	1,126.5	410.8	136.9	447.9	3,297.4	
California	30,731.4	20,809.7	12,621.6	3,824.2	876.8	3,487.1	9,921.7	

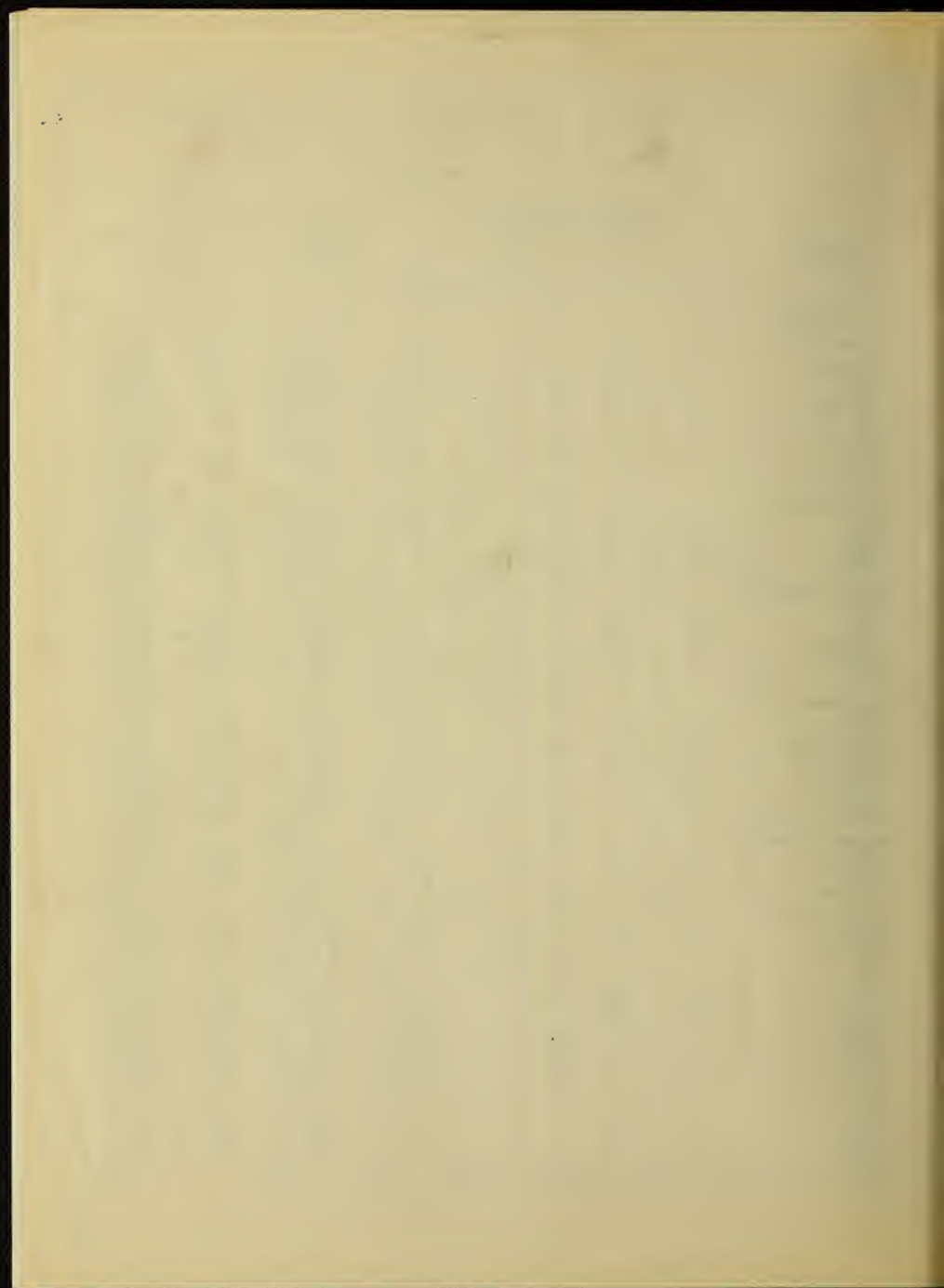
TABLE 8.--EXPENDITURES BY PURPOSE OF EXPENDITURE, 1948 AND PER CAPITA MAINTENANCE EXPENDITURES, 1948 AND 1947--Continued

(1948 statistics based on reports from 192 State and 8 Ohio receiving hospitals; 1947 statistics based on reports from 188 State and 6 Ohio receiving hospitals)

DIVISION AND STATE	PERCENTAGE DISTRIBUTION OF 1948 MAINTENANCE EXPENDITURES				Average daily resident- patients  1948	PER CAPITA MAINTENANCE EXPENDITURES <sup>1</sup>	
	Salaries and wages	Purchased provisions	Fuel, light and water	Other maintenance		1948	1947
UNITED STATES	54.8	23.0	6.4	15.7	458,769	\$ 659.13	\$ 547.84
NEW ENGLAND	55.2	21.4	8.5	14.9	40,952	686.22	579.76
Maine	48.1	28.1	9.2	14.6	2,760	611.53	549.49
New Hampshire	51.7	22.6	9.6	16.1	2,446	766.45	692.85
Vermont	52.5	16.5	7.9	23.1	1,147	621.65	517.52
Massachusetts	56.7	19.9	9.7	13.7	23,412	671.79	579.13
Rhode Island	57.4	28.7	0.2	13.7	3,009	515.92	392.90
Connecticut	54.3	21.7	7.3	16.7	8,178	800.45	635.17
MIDDLE ATLANTIC	61.8	21.7	6.1	10.4	125,825	776.99	645.26
New York	65.4	20.7	5.7	8.2	79,043	859.14	700.32
New Jersey	59.9	19.8	6.7	13.6	11,865	713.36	617.66
Pennsylvania	51.2	25.7	7.0	16.1	34,917	612.64	527.24
EAST NORTH CENTRAL	53.0	20.8	6.9	19.3	86,785	725.04	609.63
Ohio	55.0	22.4	9.0	13.6	22,898	634.62	561.00
Indiana	42.4	22.8	9.5	25.3	8,700	404.64	340.05
Illinois	44.5	23.2	6.6	25.7	33,708	788.39	696.56
Michigan	66.0	15.5	5.0	13.5	19,468	846.01	615.95
Wisconsin	63.0	15.0	8.0	14.0	2,011	907.70	868.63
WEST NORTH CENTRAL	49.1	26.2	7.9	16.8	42,626	479.11	403.81
Minnesota	37.8	19.0	7.4	15.8	10,411	461.07	382.38
Iowa	48.1	26.4	8.4	17.1	6,518	494.86	410.45
Missouri	45.0	28.4	9.4	17.2	12,359	490.04	390.32
North Dakota	47.4	26.2	8.2	18.2	2,054	426.88	417.63
South Dakota	45.9	29.3	9.0	15.8	1,650	429.48	365.24
Nebraska	51.1	29.2	4.7	15.0	4,403	618.19	542.85
Kansas	41.3	31.8	7.4	19.5	5,231	388.65	351.08
SOUTH ATLANTIC	49.1	26.2	6.3	18.4	57,604	615.41	495.36
Delaware	44.4	25.8	7.9	21.9	1,226	696.91	533.26
Maryland	45.8	28.1	8.5	17.6	7,260	603.00	452.97
District of Columbia	70.1	14.2	3.7	12.0	6,342	1,406.75	1,219.21
Virginia	39.1	32.6	4.6	23.7	9,616	520.69	373.03
West Virginia	41.7	29.3	5.4	23.6	4,558	404.11	349.36
North Carolina	42.1	23.2	6.7	28.0	8,410	625.25	457.28
South Carolina	36.4	39.3	6.3	18.0	4,980	487.99	465.30
Georgia	38.2	33.2	10.4	18.2	9,152	346.58	312.11
Florida	48.2	32.9	8.6	10.3	6,060	591.88	435.48
EAST SOUTH CENTRAL	37.1	36.1	7.4	19.4	23,430	383.53	328.18
Kentucky	42.9	39.8	10.2	7.1	6,720	392.52	312.23
Tennessee	30.3	48.6	3.7	17.4	6,343	307.48	260.14
Alabama	36.3	26.6	7.7	29.4	5,904	490.43	419.05
Mississippi	37.4	31.9	6.5	24.2	4,463	336.67	298.40
WEST SOUTH CENTRAL	37.1	32.4	4.1	26.4	29,903	432.11	376.73
Arkansas	41.5	25.4	4.3	28.8	4,766	451.05	361.06
Louisiana	39.9	30.7	3.9	25.5	6,964	373.86	350.75
Oklahoma	31.2	33.7	4.5	30.6	7,162	475.50	349.06
Texas	37.7	35.6	3.8	22.9	11,011	432.54	417.85
MOUNTAIN	56.0	18.3	5.3	20.4	12,315	667.08	575.64
Montana	50.9	36.5	3.4	9.2	1,847	564.39	483.65
Idaho	49.7	18.4	9.2	22.7	1,093	552.91	490.79
Wyoming	34.1	20.4	6.6	38.9	606	468.85	240.37
Colorado	63.2	15.4	5.0	16.4	4,842	723.24	677.86
New Mexico	48.8	23.0	7.4	20.8	976	758.61	580.67
Arizona	50.0	13.2	4.0	32.8	1,391	787.41	631.51
Utah	64.5	8.5	3.5	23.5	1,199	579.22	509.07
Nevada	40.6	15.4	11.1	32.9	361	698.48	581.28
PACIFIC	59.5	20.1	4.8	15.6	39,329	701.92	544.80
Washington	57.0	28.3	6.8	7.9	6,862	681.15	645.56
Oregon	53.1	19.3	6.5	21.1	4,047	524.36	425.92
California	60.7	18.4	4.2	16.7	28,420	732.22	537.09

<sup>1</sup>Based on average daily resident-patient population of hospitals reporting expenditures.





## Current Reports

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The average daily resident patient population in State mental hospitals in 1949 was 475,540. This means that, on the average, there were slightly more than 3 patients per 1,000 population<sup>1</sup> in daily residence in such hospitals throughout the United States during 1949. There was considerable interstate variation, New York, for instance, having a ratio of 5.6 compared to 1.7 in New Mexico.

for about 9 percent of the resident patient population in all non-federal public hospitals for the mentally ill, it would appear that the differences mentioned above are fairly good indices of variation in the extent to which facilities for the care of the mentally ill were available. It is evident from figure 1 that the Southern and Western States, with few exceptions, had low ratios compared to the Northern and Eastern ones. The picture in 1948 was similar to that in 1949.

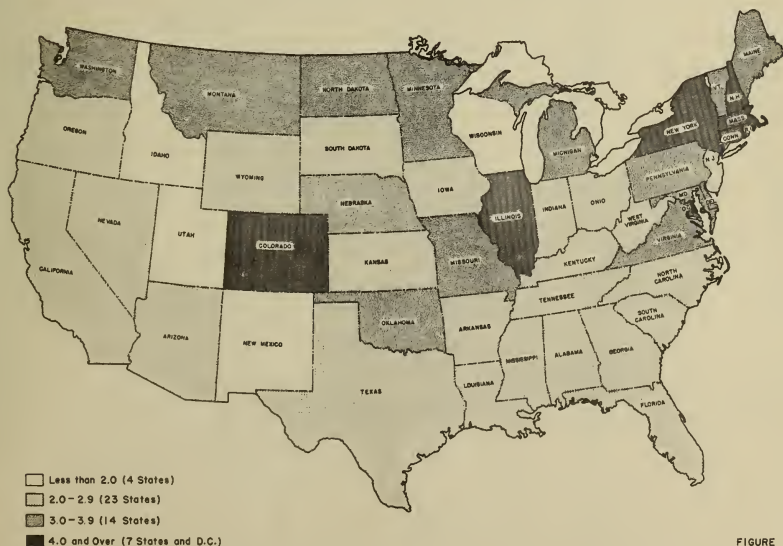


FIGURE 1

<sup>1</sup>Based on estimated civilian population as of July 1 of the corresponding year. Source: Series P-25, No. 47, Dept. of Commerce, Bureau of Census.

TABLE 1.--MOVEMENT OF POPULATION IN STATE HOSPITALS FOR MENTAL DISEASE BY DIVISION AND STATE. 1949

(Statistics based on reports from 199 State and 8 Ohio receiving hospitals)

DIVISION AND STATE	Number of hospitals reporting	ON BOOKS AT BEGINNING OF YEAR			ADMISSIONS DURING YEAR		In trans- fers	SEPARATIONS DURING YEAR				Out trans- fers	ON BOOKS AT END OF YEAR		
		In hos- pital	In family care	In other extra- mural care	First admis- sions	Re- admis- sions		Discharges		Deaths			In hos- pital	In extra- mural care	
								From hos- pital	From extra- mural care	In hos- pital	In extra- mural care				
UNITED STATES	207	468,799	2,917	74,227	104,365	34,738	8,852	34,121	49,099	39,117	960	9,666	478,003	3,457	79,456
NEW ENGLAND	21	41,385	481	4,832	10,019	3,198	459	4,540	3,803	4,083	56	504	41,662	513	5,213
Maine	2	2,756	--	215	508	194	11	158	241	234	--	1	2,809	--	241
New Hampshire	1	2,439	--	489	836	243	--	195	663	321	--	--	2,516	--	403
Vermont	1	1,179	--	28	367	159	--	248	121	111	--	--	1,225	--	28
Massachusetts	13	23,675	197	2,569	5,567	1,559	403	2,800	1,729	2,261	27	475	23,633	199	2,846
Rhode Island	1	3,029	263	454	850	252	14	290	301	348	11	2	3,166	289	455
Connecticut	3	8,507	21	1,077	1,891	791	31	849	848	798	18	26	8,514	25	1,240
MIDDLE ATLANTIC	41	127,870	1,119	15,443	23,445	7,845	2,007	4,326	11,576	10,346	237	2,209	131,367	1,231	16,437
New York	21	80,390	1,119	8,673	15,163	5,173	1,668	2,999	6,770	6,866	204	1,837	82,942	1,231	9,337
New Jersey	3	11,958	--	1,660	3,054	1,211	131	1,327	1,233	1,093	33	188	12,234	--	1,806
Pennsylvania	17	35,522	--	5,110	5,228	1,461	208	--	3,573	2,387	--	184	36,091	--	5,294
EAST NORTH CENTRAL	48	88,551	770	12,949	21,958	8,778	1,504	10,818	8,703	7,705	154	1,875	90,002	1,041	14,152
Ohio	20	23,166	98	4,240	5,967	2,354	825	2,885	3,087	1,747	67	730	23,169	100	4,865
Indiana	6	9,170	--	635	1,497	347	100	112	836	762	21	109	9,286	--	523
Illinois	11	34,800	344	2,836	9,203	4,414	307	6,081	2,056	3,487	--	304	35,608	509	3,259
Michigan	8	19,128	328	1,498	3,652	933	157	722	1,583	1,544	44	174	19,830	432	4,087
Wisconsin	3	1,987	--	740	1,639	710	115	1,018	601	165	22	558	2,109	--	717
WEST NORTH CENTRAL	25	42,041	--	7,697	6,790	1,896	718	1,837	3,487	3,280	137	991	42,175	--	7,808
Minnesota	7	10,388	--	1,664	1,888	628	628	565	1,047	984	30	654	10,285	--	1,631
Iowa	5	6,188	--	2,982	1,132	265	70	139	567	527	35	300	6,366	--	2,997
Missouri	5	12,473	--	1,813	1,635	437	7	222	1,060	883	7	5	12,353	--	1,205
North Dakota	1	2,078	--	244	414	105	--	140	185	157	3	--	2,107	--	249
South Dakota	1	1,651	--	20	377	117	--	307	42	159	--	--	1,618	--	249
Nebraska	3	4,420	--	546	819	201	7	332	301	252	3	--	4,426	--	810
Kansas	3	5,146	--	958	505	143	36	132	285	318	59	26	5,031	--	937
SOUTH ATLANTIC	23	57,086	265	9,318	12,660	4,531	659	3,375	7,201	4,382	39	659	59,667	251	9,846
Delaware	1	1,236	--	381	363	88	--	76	196	99	--	--	1,263	--	437
Maryland	4	7,445	263	1,198	1,229	631	96	339	924	482	19	37	7,543	250	1,168
Dist. of Columbia	1	6,345	--	317	1,147	323	--	496	362	446	3	--	6,354	--	271
Virginia	5	9,696	--	2,039	2,286	1,512	15	959	1,607	829	--	56	10,001	--	2,126
West Virginia	4	4,315	--	981	1,367	532	50	860	573	404	7	60	4,603	--	858
North Carolina	4	8,496	2	1,382	1,816	429	289	177	1,098	565	4	309	8,751	1	1,619
South Carolina	1	5,050	--	1,043	1,502	391	--	309	875	431	--	--	5,096	--	1,213
Georgia	1	9,367	--	1,367	1,925	465	--	21	1,138	732	--	--	9,586	--	1,847
Florida	2	6,036	--	607	1,005	260	169	78	428	391	6	197	6,371	--	606
EAST SOUTH CENTRAL	11	23,790	--	3,762	5,851	1,807	523	1,165	3,994	1,961	15	579	24,353	--	3,666
Kentucky	4	6,733	--	1,088	1,517	355	421	449	707	601	15	412	6,872	--	1,058
Tennessee	3	6,415	--	398	1,156	390	--	563	424	516	--	7	6,451	--	390
Alabama	2	6,045	--	788	1,567	632	20	140	1,283	444	--	20	6,270	--	895
Mississippi	2	4,597	--	1,488	1,611	430	82	13	1,580	398	--	140	4,760	--	1,317
WEST SOUTH CENTRAL	15	31,007	85	7,368	8,322	2,492	1,028	2,587	4,331	2,477	44	1,151	34,545	159	8,008
Arkansas	1	4,733	--	1,898	1,582	461	--	226	1,249	395	--	8	4,819	--	1,980
Louisiana	2	6,940	--	1,540	1,449	298	98	142	995	387	7	63	7,093	--	1,638
Oklahoma	4	7,437	--	911	1,203	652	10	339	838	538	1	7	7,522	--	971
Texas	8	14,897	85	3,016	4,088	1,078	920	1,880	1,249	1,157	36	1,073	15,111	159	3,119
MOUNTAIN	9	12,448	--	4,713	2,743	899	282	1,067	1,123	1,074	78	24	12,698	--	5,021
Montana	1	1,836	--	2,715	396	212	--	103	39	156	--	--	1,875	--	2,986
Idaho	2	1,117	--	190	320	186	--	183	150	112	12	--	1,103	--	253
Wyoming	1	611	--	32	116	83	--	64	47	67	--	3	617	--	61
Colorado	1	1,850	--	607	671	156	282	336	187	157	15	21	2,005	--	713
New Mexico	1	1,019	--	571	246	8	--	31	339	84	48	--	1,034	--	311
Arizona	1	1,448	--	360	575	89	--	260	184	107	3	--	1,443	--	475
Utah	1	1,208	--	175	309	157	--	238	119	74	--	--	1,239	--	179
Nevada	1	359	--	40	110	10	--	52	58	17	--	--	352	--	10
PACIFIC	14	40,118	197	8,143	12,577	3,292	1,642	4,406	1,821	3,839	200	1,663	41,531	262	9,216
Washington	3	6,940	--	834	1,772	387	38	413	687	782	13	32	7,045	--	999
Oregon	2	4,130	--	943	1,264	309	18	563	381	455	23	34	4,184	--	1,024
California	9	29,048	197	6,368	9,541	2,596	1,586	3,430	3,753	2,602	164	1,507	30,305	262	7,223

<sup>1</sup>Patients in low county homes are included in State hospital statistics as patients in "other extra-mural care."



*Comparability of statistics.*--Statistics based on State hospital data must be interpreted with caution due to limitations of reporting, such as variations in coverage from year to year and the limited scope of the data requested. Although from a bookkeeping point of view, data on movement, for instance, have been considered adequate, if not completely satisfactory, for the purposes of most users, it is obvious that the time has come when a concerted effort must be made to increase both the scope of the information sought in the Census and the completeness of coverage and to improve the calibre of reporting.

It should be borne in mind that in States such as Wisconsin and New Jersey, with a system of county mental hospitals designed to accept people who, in other States, would normally be admitted to State mental hospitals, data pertaining to average daily resident-patient population and other categories of movement in State hospitals are not strictly comparable to those in other States. However, in Iowa, because of the relationship between State and county hospitals, all patients in county hospitals are considered as in "other extramural care" and carried as such in the State hospital data. In similar fashion, the presence in a State of large private hospitals such as Brattleboro Retreat in Vermont or of Federal facilities for mentally ill veterans may decrease the number of admissions to the State hospitals and, hence, the need for State facilities.

*Coverage.*--The statistics presented here are provisional, covering either the calendar year or the fiscal year ending in the calendar year and are based on data furnished to the National Institute of Mental Health on annual census schedules by the individual hospitals or appropriate State mental health boards.

All 207 State hospitals (including 8 Ohio receiving hospitals) submitted movement schedules for 1949 showing a total of 104,365 first admissions, 478,003 resident patients at the end of the year, and an average daily resident patient population of 475,540 persons. Schedules of first admissions by age and diagnosis were submitted by 193 hospitals with 94.7 percent of the total first admissions; schedules of administrative staff and of expenditures by 206 and 205 hospitals, respectively. The hospitals reporting staff and expenditures data accounted for 99.1 and 99.0 percent respectively of the average daily resident population.

*Movement of population.*--Table 1 shows the movement of population in State mental hospi-

tals for the United States, by Division and State; due to limitations of space certain totals have been eliminated. Statistics on the movement of population which present a formal accounting of the flow of patients in or out of institutions during the course of a year, involve four major categories: (1) patients on books at the beginning of the year, (2) all admissions, (3) all separations, (4) patients on books at the end of year. For any year the number of patients on the books at the beginning of the year plus the total number of admissions should equal the sum of all separations during the year plus the number of patients on the books at the end of the year.

Almost 700,000 persons were reported as on the books of State hospitals for mental disease throughout the country during 1949. In view of the fact that there is some duplication in the data when the same individual in the course of the year is admitted to more than one hospital or to the same hospital two or more times the reported 693,898 patient transactions represented an overstatement for the 207 reporting hospitals.

Data reported in table 1 have certain limitations. For example, first admission figures undoubtedly include an unknown number of patients who have received hospitalization in a mental institution previously. Review of transfer and extramural care data indicate that studies of interstate variations in definitions of such movement categories are necessary. In States where private hospitals do not report to a central State authority, it is not known to what extent transfers represent movement of patients from one hospital to another within the same system or represent a true gain or loss of patient population.

Table 2 presents the basic data and summary rates per 100,000 population for 1949 for first admissions, patients on the books during the year, and resident patients at the end of the year. The corresponding rates for 1948 are shown. Rates for 1948 are based on the latest available population data. Since most admissions to public hospitals for mental disease are to State mental hospitals, and since admissions to these hospitals are limited, in general, to residents of the respective States, the statistics here presented may be of aid in making crude interstate comparisons.

Some 478,003 persons or 324.0 per 100,000 population remained as resident patients in these hospitals at the end of the year. It is interesting to note that during the year the number of resident patients remaining in State mental hospitals increased by about 2 percent

TABLE 2.--SUMMARY DATA FOR MOVEMENT OF POPULATION, IN STATE HOSPITALS FOR MENTAL DISEASE,  
BY DIVISION AND STATE, 1949, WITH RATES, 1949 AND 1948

(Statistics for both years based on reports from 199 State and 6 Ohio receiving hospitals)

DIVISION AND STATE	MOVEMENT OF POPULATION: 1949						RATE PER 100,000 POPULATION <sup>1</sup>					
	Patients on books at beginning of year	First ad- missions	Re- admissions	All discharges	Deaths in hospital	Patients on books at end of year	First admissions		On books during year <sup>2</sup>		Resident pa- tients at end of year	
							1949	1948	1949	1948	1949	1948
UNITED STATES	545,943	104,365	34,738	83,220	39,147	560,916	70.8	69.7	470.4	462.3	324.0	323.4
NEW ENGLAND	46,698	10,019	3,198	8,343	4,083	47,388	107.6	102.8	648.2	643.5	447.3	450.4
Maine	2,971	508	194	399	234	3,050	56.4	61.7	408.9	419.4	311.8	314.3
New Hampshire	2,928	836	243	758	331	2,918	161.1	149.1	772.1	760.8	484.6	483.0
Vermont	1,207	367	159	369	111	1,253	100.3	94.4	473.5	455.7	334.7	330.3
Massachusetts	26,441	5,567	1,559	4,529	2,261	26,678	117.2	108.7	715.3	714.3	497.6	503.4
Rhode Island	3,746	850	252	591	348	3,910	109.4	101.0	625.7	587.3	407.5	391.8
Connecticut	9,405	1,891	791	1,697	798	9,579	94.5	97.4	650.6	600.3	415.5	420.7
MIDDLE ATLANTIC	144,432	23,445	7,845	15,902	10,346	149,035	78.5	77.2	595.3	587.1	440.0	438.0
New York	90,182	15,163	5,173	9,769	6,866	93,510	103.0	101.5	762.3	747.9	563.6	559.6
New Jersey	13,618	3,054	1,211	2,560	1,093	14,140	64.4	65.1	380.0	378.1	260.2	256.5
Pennsylvania	40,632	5,228	1,461	3,573	2,387	41,385	50.3	48.4	457.2	455.0	347.2	348.2
EAST NORTH CENTRAL	102,270	21,958	8,778	19,581	7,705	105,195	73.1	74.8	447.6	441.6	299.5	299.0
Ohio	27,504	6,967	2,354	5,972	1,747	28,134	74.7	81.1	458.9	460.1	280.1	291.3
Indiana	9,806	1,497	347	948	762	9,909	38.6	37.7	301.8	297.4	236.5	239.2
Illinois	37,980	9,203	4,414	6,737	3,487	39,376	107.3	106.1	684.6	596.4	414.6	413.7
Michigan	24,254	3,652	953	3,305	1,544	24,949	66.3	60.3	463.3	457.4	316.6	315.0
Wisconsin	2,727	1,639	710	1,619	166	2,827	49.3	49.2	156.2	158.6	83.4	61.0
WEST NORTH CENTRAL	50,341	6,790	1,696	5,324	3,280	50,043	49.6	54.3	436.6	446.9	306.2	316.9
Minnesota	12,052	1,888	628	1,612	984	11,916	64.8	69.0	521.3	523.3	352.8	364.6
Iowa	9,470	1,122	265	706	527	9,353	44.0	42.1	438.5	430.9	249.3	260.9
Missouri	13,656	1,635	437	1,282	683	13,658	41.9	48.3	402.9	412.8	316.3	323.5
North Dakota	2,322	414	105	325	167	2,356	71.0	66.5	487.3	486.8	361.4	370.4
South Dakota	1,671	377	117	349	159	1,657	61.3	65.5	352.0	364.5	263.1	274.3
Nebraska	5,066	849	201	633	252	5,235	66.3	59.7	478.0	472.4	345.4	356.7
Kansas	6,104	606	143	417	318	6,968	27.5	49.5	369.5	417.2	273.9	288.9
SOUTH ATLANTIC	67,569	12,660	4,531	10,576	4,382	69,763	62.1	62.0	418.7	417.5	292.6	291.3
Delaware	1,620	363	88	272	99	1,700	114.2	98.4	651.3	612.0	387.2	389.9
Maryland	8,906	1,229	531	1,263	482	8,961	53.3	62.5	466.9	472.5	327.2	328.6
District of Columbia	6,662	1,147	323	858	446	6,825	141.8	126.7	1005.2	998.1	810.1	742.0
Virginia	11,736	2,286	1,512	2,566	829	12,127	71.3	67.4	485.7	470.6	311.8	304.5
North Carolina	5,296	1,387	532	1,433	404	5,361	71.6	77.2	375.1	391.0	232.5	244.9
South Carolina	9,880	1,816	428	1,275	565	10,271	46.7	42.9	359.5	325.3	220.0	223.9
Georgia	6,093	1,502	391	1,244	434	6,308	75.8	77.4	403.1	398.7	257.2	261.1
Florida	10,734	1,925	465	1,359	732	11,233	58.1	58.6	395.8	390.6	259.1	288.4
Alabama	6,643	1,005	260	506	391	6,977	38.1	39.0	306.4	310.3	241.7	240.4
EAST SOUTH CENTRAL	27,552	6,851	1,807	5,159	1,961	28,019	52.5	62.9	320.5	313.6	218.4	217.8
Kentucky	7,821	1,517	355	1,156	601	7,930	53.6	63.3	357.1	340.7	242.7	240.9
Tennessee	6,813	1,156	390	967	518	6,847	35.5	43.4	256.7	265.3	198.1	207.1
Alabama	6,833	1,567	632	1,423	444	7,165	52.3	50.1	302.1	294.4	209.3	203.1
Mississippi	6,085	1,611	430	1,693	398	6,077	77.9	71.6	397.1	380.6	230.3	224.6
WEST SOUTH CENTRAL	41,460	8,322	2,492	6,918	2,477	42,712	59.0	54.9	377.7	359.5	244.8	236.8
Arkansas	6,631	1,482	464	1,475	395	6,799	86.7	85.8	475.5	465.2	254.1	261.6
Louisiana	9,480	1,989	298	1,137	387	8,731	55.3	41.3	393.9	377.3	270.6	257.8
Oklahoma	8,351	1,203	652	1,177	538	8,493	57.0	58.9	463.9	468.4	356.3	353.5
Texas	17,998	4,088	1,078	3,129	1,157	18,689	54.1	51.1	318.8	297.3	200.0	189.0
MOUNTAIN	17,161	2,743	899	2,190	1,074	17,719	57.1	54.9	438.9	377.7	264.3	268.8
Montana	4,551	396	212	142	156	4,861	71.0	53.0	924.6	438.9	336.0	346.1
Idaho	1,307	320	186	113	112	1,356	56.1	54.6	318.1	294.8	193.5	194.9
Wyoming	663	116	83	111	67	681	42.8	42.4	318.1	310.2	227.7	231.4
Colorado	5,457	671	154	323	457	5,748	54.5	54.3	532.8	538.8	408.7	414.3
New Mexico	1,593	246	8	370	84	1,345	39.6	37.1	287.4	315.1	166.5	176.1
Arizona	1,808	575	89	444	107	1,918	80.5	81.3	345.8	315.2	200.7	206.3
Utah	1,369	309	137	357	74	1,418	45.8	47.2	273.9	269.3	183.6	182.8
Nevada	399	10	10	110	17	392	70.1	68.6	330.6	328.9	224.2	225.8
PACIFIC	48,460	12,577	3,292	9,227	3,839	51,042	88.9	80.4	466.4	454.0	293.7	292.3
Washington	7,774	1,772	387	1,100	782	8,044	76.6	71.0	430.9	423.1	304.5	302.1
Oregon	5,073	1,264	309	944	455	5,208	84.8	77.8	446.9	431.5	280.0	276.9
California	35,613	9,541	2,996	7,183	2,602	37,790	82.3	82.9	477.2	464.1	293.1	292.0

<sup>1</sup>Estimated civilian population as of July 1, for the corresponding year. Source: P-25, No. 47, Department of Commerce, Bureau of Census.

<sup>2</sup>Patients on books during year comprises patients on books at beginning of year and all admissions including transfers.

TABLE 3.--FIRST ADMISSIONS TO STATE HOSPITALS FOR MENTAL DISEASE, BY AGE AND SEX, FOR THE UNITED STATES, 1949, WITH RATES FOR 1949 AND 1948

(Statistics for both years based on reports from 199 State and 8 Ohio receiving hospitals)

AGE IN YEARS	FIRST ADMISSIONS: 1949			PERCENT DISTRIBUTION OF TOTAL FIRST ADMISSIONS		RATE PER 100,000 <sup>1</sup> CIVILIAN POPULATION			
						1949		1948	
	Total	Male	Female	1949	1948	Total	Female	Total	Female
All Ages	104,365	57,586	46,779	100.0	100.0	70.8	62.5	69.7	63.2
Under 15	903	564	349	0.9	1.0	2.2	1.8	2.3	1.8
15 to 19	3,589	2,086	1,503	3.7	3.7	34.6	28.4	32.3	26.6
20 to 24	6,481	3,692	2,789	6.6	6.3	57.0	47.1	50.0	44.7
25 to 29	7,828	3,980	3,848	8.0	7.6	65.9	62.4	59.6	58.2
30 to 34	8,685	4,330	4,355	8.9	8.6	77.9	74.7	71.5	70.2
35 to 39	9,282	5,114	4,168	9.5	9.5	86.4	75.5	82.8	73.9
40 to 44	8,958	5,168	3,790	9.2	9.0	90.9	75.6	85.2	71.6
45 to 49	8,056	4,587	3,469	8.2	8.0	88.9	75.6	82.7	71.7
50 to 54	6,752	3,775	2,977	6.9	7.0	83.0	72.6	80.8	75.5
55 to 59	6,125	3,554	2,571	6.3	6.4	83.6	69.9	81.4	71.3
60 to 64	6,035	3,537	2,498	6.2	6.3	100.0	82.7	100.3	84.2
65 to 69	6,141	3,538	2,603	6.3	6.6	137.6	114.3	140.6	113.6
70 and over	18,836	9,933	8,903	19.3	20.0	277.5	244.7	279.7	254.9
Not reported <sup>2</sup>	6,694	3,738	2,956	--	--	--	--	--	--
Median age	46.9	47.2	46.6	--	--	--	--	--	--

<sup>1</sup>Estimated civilian population as of July 1, for the corresponding year. Source: Series P-25, No. 39, Department of Commerce, Bureau of Census.

<sup>2</sup>Not reported includes (a) first admissions shown on age and diagnosis schedules, but by age only and not by diagnosis (b) first admissions on movement schedules of hospitals not submitting schedules of first admissions by age and diagnosis (c) first admissions with diagnosis but unknown age.

TABLE 4.--FIRST ADMISSIONS TO STATE HOSPITALS FOR MENTAL DISEASE, BY MENTAL DISORDER AND SEX,  
FOR THE UNITED STATES, 1949, WITH PERCENTS AND RATES: 1949 AND 1948

(Statistics for both years based on reports from 199 State and 8 Ohio receiving hospitals)

MENTAL DISORDER	NUMBER			Percent Distribution of Total First Admissions <sup>1</sup>		RATE PER 100,000 POPULATION <sup>2</sup>					
	1949					1949			1948		
	Total	Male	Female	1949	1948	Total	Male	Female	Total	Male	Female
All patients	104,365	57,566	46,779	100.0	100.0	70.8	79.2	62.5	69.7	76.3	63.2
With psychosis	79,980	41,691	38,289	81.6	83.0	54.2	57.4	51.2	52.8	54.6	51.1
General paresis	3,641	2,616	1,025	3.7	4.5	2.5	3.6	1.4	2.8	4.1	1.6
With other forms of syphilis of the C. N. S.	639	456	183	0.7	0.7	0.4	0.6	0.2	0.5	0.6	0.3
With epidemic encephalitis	119	75	44	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
With other infectious diseases	176	108	68	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Alcoholic	5,055	4,145	910	5.2	5.0	3.4	5.7	1.2	3.2	5.2	1.2
Due to drugs and other exogenous poisons	413	202	211	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Traumatic	476	394	82	0.5	0.5	0.3	0.5	0.1	0.3	0.6	0.1
With cerebral arteriosclerosis	15,139	8,693	6,446	15.5	15.7	10.3	12.0	8.6	10.0	11.2	8.7
With other disturbances of circulation	527	305	222	0.5	0.6	0.4	0.4	0.3	0.4	0.5	0.3
With convulsive disorders	1,397	782	615	1.4	1.6	0.9	1.1	0.8	1.0	1.2	0.9
Senile	11,252	5,361	5,891	11.5	12.5	7.6	7.4	7.9	7.9	7.6	8.3
Involuntary psychosis	4,487	1,260	3,227	4.6	4.5	3.0	1.7	4.3	2.9	1.6	4.2
Due to other metabolic, etc., diseases	622	270	352	0.6	0.7	0.4	0.4	0.5	0.5	0.4	0.5
Due to new growth	209	115	94	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1
With organic changes of the nervous system	1,117	634	483	1.1	1.1	0.8	0.9	0.6	0.7	0.8	0.6
Manic-depressive	5,685	2,178	3,507	5.8	6.1	3.9	3.0	4.7	3.9	2.9	4.9
Schizophrenia (dementia praecox)	22,212	10,195	12,017	22.7	20.9	15.1	14.0	16.1	13.3	11.8	14.7
Paranoia and paranoid conditions	961	547	414	1.0	1.1	0.7	0.8	0.6	0.7	0.7	0.7
With psychopathic personality	866	574	292	0.9	1.0	0.6	0.9	0.4	0.6	0.9	0.4
With mental deficiency	2,360	1,276	1,082	2.4	2.6	1.6	1.8	1.4	1.6	1.8	1.5
Other and undiagnosed psychoses	2,607	1,503	1,104	2.7	2.9	1.8	2.1	1.5	1.9	2.1	1.6
Psychoneuroses	4,133	1,671	2,462	4.2	4.1	2.9	2.3	3.3	2.6	2.2	3.0
Without psychosis or psychoneurosis	13,864	10,666	3,198	14.2	12.9	9.4	14.7	4.3	8.2	12.6	3.9
Epilepsy	406	233	153	0.4	0.4	0.3	0.3	0.2	0.2	0.3	0.2
Mental deficiency	1,339	871	468	1.4	1.3	0.9	1.2	0.6	0.9	1.1	0.6
Alcoholism	7,056	6,042	1,014	7.2	6.2	4.8	8.3	1.4	3.9	6.7	1.2
Drug addiction	452	241	211	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Personality disorders due to epidemic encephalitis	64	38	26	0.1	0.1	(4)	0.1	(4)	(4)	(4)	(4)
Psychopathic personality	1,323	992	331	1.4	1.3	0.9	1.4	0.4	0.8	1.3	0.4
Primary behavior disorders	524	340	184	0.5	0.6	0.4	0.5	0.2	0.4	0.5	0.3
Other, unclassified, and unknown	2,700	1,869	831	2.8	2.6	1.8	2.6	1.1	1.7	2.4	0.9
Mental disorder not reported <sup>3</sup>	6,388	3,556	2,830	--	--	--	--	--	--	--	--

<sup>1</sup>Percent totals may not equal 100 percent due to rounding.

<sup>2</sup>Estimated civilian population as of July 1, for the corresponding year. Source: Series P-26, No. 39, Department of Commerce, Bureau of Census.

<sup>3</sup>Mental disorder not reported includes (a) first admissions shown on age and diagnosis schedules, but by age only and not by diagnosis,

(b) first admissions for hospitals not submitting schedules of first admissions by age and diagnosis but reporting total first admissions elsewhere.

<sup>4</sup>Less than .05.

over the 468,799 persons in these hospitals at the beginning of the year.

For the country as a whole it may be noted that, between 1948 and 1949, there was a 1.6 percent increase in the first admission rate, a 1.8 percent increase in the rate for patients on the books during the year, and a 0.2 percent increase in rates pertaining to resident patients at the end of the year. These increases must be interpreted with caution since availability of hospital facilities, increase in

medical, nursing and attendant personnel, as well as other factors, often exercise greater influence over these rates than true changes, if any, in the incidence and prevalence of hospitalizable mental disorders in the population. It is well to remember, moreover, that just as a new therapeutic measure or a change in discharge policy may account for a sharp drop in resident patients at the end of the year in a given State, so may an increase in resident patients in another State be due to the availability of additional hospital facilities as



well as to a real increase in incidence and prevalence. In other words, whatever changes occur may be due to any of a number of causes acting singly or in combination and it is difficult to determine the relative effect of each such cause.

*First admissions by age and sex.*--In table 3 are shown the number of first admissions by age and sex, 1949, and the corresponding percents and rates per 100,000 population, 1949 and 1948. There was very little difference between the percent distribution for the two years. Almost one-third of the first admissions occurred in individuals 60 years of age and over. In 1949, first admission rates for males exceeded those for females in every age group. The rate for both sexes, with few exceptions, increased steadily with age, showing a marked spurt after age 60.

*First admissions by diagnosis, age and sex.*--Table 4 presents the number of first admissions to State mental hospitals by diagnosis and sex, 1949, and the respective percents and rates per 100,000 population for 1949 and 1948. The percent distribution of mental disorders appears to show little change in the two years under consideration. In males, as well as in females, patients diagnosed as psychotic accounted for over 80 percent of all diagnosed first admissions. The diagnosis of schizophrenia was reported in about 23 percent of these admissions, psychosis with cerebral arteriosclerosis in 16 percent, senile psychosis in 12 percent, and manic-depressive psychosis in 6 percent. Thus, these four diagnoses accounted for more than half of all diagnosed first admissions.

Among the psychoses, the following diagnoses showed markedly higher rates for males than for females: general paresis, psychosis with other forms of syphilis of the central nervous system, alcoholic psychosis, psychosis due to trauma, and psychosis with psychopathic personality. As was to be expected, the female rates were distinctly higher for the involutional psychoses. These findings were also in evidence in 1948 rates.

Table 5 gives age specific first admission rates, by diagnosis, to State mental hospitals in 1949. These data are shown graphically in figure 2. It is evident that in the age group 15-49 years schizophrenia showed the highest age specific first admission rates. For the next several years of age the involutional psychoses predominated. From age 60 on a sharp increase in the first admission rate of mental diseases of the senium accounted for the markedly increased total first admission rates.

The probability of being hospitalized with a mental disease was far greater after age 60 than at any other period of life. The peak age specific rates for all mental disorders combined, excluding mental diseases of the senium, was reached at 40-44 years and dropped thereafter to the end of the life span.

*Administrative statistics.*--Comparative statistics for 1949 and 1948 for State mental hospitals on overcrowding, expenditures, and administrative staff are reported in tables 6, 7 and 8 respectively.

*Overcrowding.*--Although the number of beds provided for patients in these hospitals has been constantly increasing, the demand for these beds has most often exceeded the supply. New facilities are filled almost as rapidly as they are completed. As a consequence, in a great number of States, overcrowding is a common phenomenon. In table 6 the degree of overcrowding in these hospitals is measured by the excess of average daily resident-patient population over rated capacity, expressed as a percentage of rated capacity. The average daily resident-patient population is taken as a crude measure of the number of beds provided. It should be noted that the definition of rated capacity varies from State to State and probably within the same State at different times. In 1949, the degree of overcrowding in State hospitals for mental disease in the United States was 18.1 percent as compared to 18.2 percent in 1948. In 1949, as well as in 1948, it was greatest in Illinois and Louisiana where the average daily resident population in State hospitals was about one and a half times their rated capacity. On the other hand, a number of States, six in 1948 and seven in 1949, reported a rated capacity greater than their average daily resident-patient population. There is no inference that more bed space or more adequate facilities were provided in these States than elsewhere. Table 6 also shows the average daily resident-patients per 1,000 population for the years under consideration.

*Administrative staff.*--The adequacy of care received by patients in any hospital largely depends upon the relationship between the number and type of well trained personnel and the number of patients under care. This relationship may be crudely expressed in terms of the average number of patients served by each full-time employee. The variation from hospital to hospital, however, in the number of employees not directly associated with patient care, such as farm workers, etc., would affect the meaningfulness of such ratios. The number and type of personnel on duty in State mental hospitals for the United States, by Division and State,

TABLE 5.--RATE OF FIRST ADMISSIONS TO STATE HOSPITALS FOR MENTAL DISEASE BY AGE AND MENTAL DISORDER: 1949

(Statistics based on reports from 199 State and 9 Ohio receiving hospitals)

MENTAL DISORDERS	All ages	RATE PER 100,000 <sup>1</sup>														
		Age (in years)														
		Under 15	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 and over		
All patients	70.8	2.2	34.6	57.0	65.9	77.9	86.4	90.9	88.9	83.0	83.6	100.0	137.6	277.6		
With psychosis	54.2	0.8	24.5	43.5	50.1	57.9	62.0	66.3	67.3	56.1	70.1	89.4	129.4	270.8		
General paresis	2.5	(2)	0.3	0.4	0.9	1.8	4.4	5.8	7.3	5.9	5.4	4.4	3.8	1.8		
With other forms of syphilis of the CNS	0.4	(2)	0.1	0.1	0.2	0.4	0.7	1.0	1.0	1.1	0.9	1.0	0.8	0.4		
With epidemic encephalitis	0.1	(2)	0.1	(3)	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	(3)		
With other infectious diseases	0.4	(2)	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1		
Alcoholic	3.4	(2)	0.1	0.9	2.2	4.7	6.8	8.7	9.4	7.9	6.8	5.3	4.0	0.8		
Due to drugs and other exogenous poisons	0.3	(2)	0.1	0.1	0.2	0.3	0.4	0.8	0.7	0.6	0.5	0.4	0.5	0.3		
Traumatic	0.3	(2)	0.2	0.2	0.4	0.3	0.4	0.5	0.7	0.6	0.7	0.6	0.6	0.3		
With cerebral arteriosclerosis	10.3	--	(2)	--	(2)	0.1	0.1	0.6	1.8	6.4	14.0	36.6	57.7	119.2		
With other disturbances of circulation	0.4	(2)	(2)	(2)	0.1	0.1	0.3	0.4	0.6	0.9	0.9	1.2	1.5	1.6		
With convulsive disorders	0.9	0.1	1.4	2.0	1.7	1.6	1.6	1.4	1.0	1.0	0.8	0.6	0.4	0.3		
Senile	7.6	--	--	(2)	(2)	(2)	(2)	0.1	0.1	0.4	1.3	8.6	28.6	136.5		
Involutional psychosis	3.0	--	(2)	(2)	0.1	0.2	0.9	4.7	10.5	13.9	13.2	9.8	4.3	0.6		
Due to other metabolic, etc., diseases	0.4	(2)	0.1	0.2	0.3	0.3	0.4	0.6	1.2	1.5	1.5	1.1	0.8			
Due to new growth	0.1	--	(2)	0.1	0.1	(2)	0.1	0.2	0.3	0.4	0.4	0.5	0.4	0.4		
With organic changes of the nervous system	0.8	(2)	0.3	0.2	0.4	0.5	0.8	1.0	1.5	1.9	2.2	2.3	2.1	1.1		
Manic-depressive	3.9	(2)	1.3	3.0	4.6	6.5	8.1	8.1	7.3	6.7	6.8	6.5	4.1	1.3		
Schizophrenia (dementia praecox)	15.1	0.4	15.8	30.1	32.7	34.4	30.0	23.6	16.9	11.5	8.8	5.4	3.4	1.2		
Paranoia and paranoid conditions	0.7	--	(2)	0.1	0.3	0.5	0.9	1.6	1.8	1.7	2.0	1.5	1.3	0.4		
With psychopathic personality	0.6	(2)	1.0	1.4	1.3	1.1	0.9	0.8	0.3	0.3	0.3	0.2	0.2	0.1		
With mental deficiency	1.5	0.1	2.9	3.2	2.9	2.8	2.4	2.2	2.0	1.6	1.3	0.8	0.7	0.2		
Other and undiagnosed psychoses	1.8	0.1	0.9	1.4	1.8	2.1	2.4	2.8	3.0	3.0	3.0	3.1	3.7	3.4		
Psychoneuroses	2.8	0.1	1.6	3.6	5.1	5.9	6.5	5.0	4.0	3.5	3.1	2.7	2.1	0.7		
Without psychosis or psychoneurosis	9.4	1.3	8.4	9.8	10.7	13.9	18.8	19.5	17.4	13.3	10.3	7.7	6.0	6.6		
Epilepsy	0.3	0.1	0.5	0.5	0.5	0.5	0.4	0.3	0.4	0.3	0.1	0.1	0.1	(2)		
Mental deficiency	0.9	0.4	2.3	2.2	1.4	1.2	0.9	0.9	0.6	0.7	0.5	0.3	0.3	0.1		
Alcoholism	4.8	(2)	0.1	1.3	3.6	7.6	12.7	14.1	12.5	9.1	6.6	4.7	2.7	1.0		
Drug addiction	0.3	--	0.1	0.2	0.4	0.5	0.6	0.8	0.8	0.5	0.4	0.3	0.2	0.1		
Personality disorders due to epidemic encephalitis	(2)	(2)	(2)	(2)	(2)	0.1	0.1	0.1	0.1	0.1	0.1	(2)	(2)	(2)		
Psychopathic personality	0.9	0.1	2.1	2.5	2.0	1.6	1.2	0.8	0.8	0.5	0.3	0.1	0.2	0.1		
Primary behavior disorders	0.4	0.5	1.5	0.4	0.3	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	(2)		
Other, unclassified, and unknown	1.8	0.2	1.8	2.5	2.5	2.4	2.6	2.4	2.3	2.2	2.1	2.0	2.5	4.1		

<sup>1</sup>Estimated civilian population as of July 1, 1949. Source: Series P-28, No. 36, Department of Commerce, Bureau of Census.<sup>2</sup>Less than .05.

in 1949 are shown in table 7 together with the ratio of patients to full-time employees. For comparative purposes there are included similar ratios for 1948. It should be noted that the ratio of patients to total employees is not as meaningful as the ratio of patients to employees of specific occupational groups. Thus hospitals really tending to fulfill a therapeutic function may differ markedly in their patient-physician ratio from those where the major emphasis appears to be on custody. For the country as a whole the need for full-time physicians in State mental hospitals was about 51 percent met, based on 1941 standards approved by the APA<sup>1</sup>. The deficiencies in personnel are and have been most severe in physicians, clinical psychologists, psychiatric social workers, nursing personnel, attendants and other specialized therapeutic workers.

**Expenditures.**--Table 8 presents statistics on expenditures classified by purpose of expenditure for State mental hospitals, and percent distribution of maintenance expenditures, by Division and State, for the year 1949 and per capita expenditures for maintenance for

1949 and 1948. The per capita expenditure for maintenance for State mental hospitals reporting such data for 1949 was \$719.30 compared to \$659.13 in 1948. This was an overall increase of about 9 percent in per capita cost. There was considerable interstate variation reflecting in part geographical and fiscal year variation in the general price level and, in part, variations in the type and adequacy of care provided. The degree to which hospitals were self supporting by the production of their farms and their varying needs for such items as fuel, light and water were also reflected in their per capita maintenance expenditures. For the country as a whole, about 58 percent of the State mental hospitals maintenance dollar was spent for salaries and wages, 21 percent for purchased provisions, 6 percent for fuel, light and water and 15 percent for other items of maintenance. Here also there was considerable variation between States in the relative expenditures for various maintenance items. For example, 68 percent of New York's maintenance dollar was spent for salaries and wages while only 33 percent of Tennessee's dollar was spent for the same purpose.

<sup>1</sup>By these standards there would be, exclusive of the superintendent, one physician for every 200 resident patients and one physician for every 100 admissions during the year, excluding transfers.

# FIRST ADMISSION RATES FOR SELECTED DIAGNOSES, BY AGE, TO STATE HOSPITALS FOR MENTAL DISEASE UNITED STATES, 1949

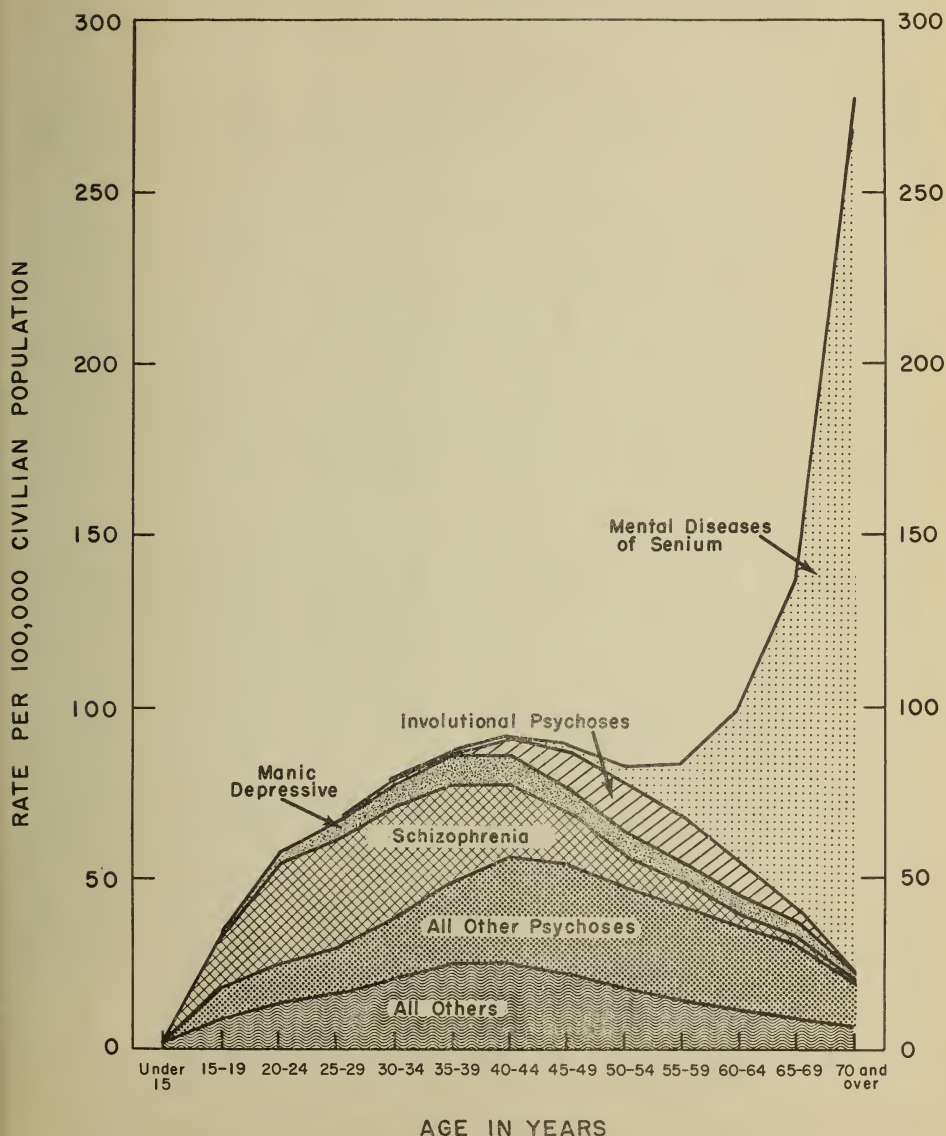


FIGURE 2



TABLE 6.--EXCESS OF AVERAGE DAILY RESIDENT-PATIENTS OVER RATED CAPACITY OF STATE HOSPITALS FOR MENTAL DISEASE, BY DIVISION AND STATE: 1949 AND 1948

(Statistics for both years based on reports from 199 State and 8 Ohio receiving hospitals)

DIVISION AND STATE	OVERCROWDING: 1949				OVERCROWDING: 1948				AVERAGE DAILY RESIDENT-PATIENTS PER 1,000 CIVILIAN POPULATION <sup>2</sup>	
	Average daily resident patients	Rated capacity	Excess of population over capacity <sup>1</sup>		Average daily resident patients	Rated capacity	Excess of population over capacity <sup>1</sup>		1949	1948
			Number	Percent			Number	Percent		
UNITED STATES	475,540	402,822	72,718	18.1	463,496	392,224	71,272	18.2	3.2	3.2
NEW ENGLAND	41,558	36,294	5,264	14.5	40,932	34,722	6,230	17.9	4.5	4.5
Maine	2,788	2,298	490	21.3	2,760	2,207	553	25.1	3.1	3.1
New Hampshire	2,463	2,114	369	17.5	2,446	2,114	332	15.7	4.5	4.8
Vermont	1,211	982	229	23.3	1,147	858	289	33.7	3.3	3.2
Massachusetts	23,663	20,490	3,173	15.5	23,412	19,397	4,015	20.7	5.0	5.0
Rhode Island	3,114	2,700	414	15.3	3,009	2,700	309	11.4	4.0	3.9
Connecticut	8,299	7,710	589	7.6	8,178	7,446	732	9.8	4.1	4.1
MIDDLE ATLANTIC	129,694	104,490	25,204	24.1	126,272	101,849	24,423	24.0	4.3	4.3
New York	81,694	66,329	15,355	19.5	79,043	65,874	13,169	20.0	5.6	5.5
New Jersey	12,127	8,949	3,178	35.5	11,865	8,949	2,916	32.6	2.8	2.6
Pennsylvania	35,873	27,202	8,671	31.9	35,364	27,026	8,338	30.9	3.5	3.5
EAST NORTH CENTRAL	90,039	69,008	21,031	30.5	87,577	68,008	19,569	28.8	3.0	3.0
Ohio	23,526	20,254	3,272	16.2	22,898	20,099	2,799	13.9	2.9	2.9
Indiana	9,231	8,705	526	6.0	9,078	8,511	567	6.6	2.4	2.4
Illinois	35,484	22,676	12,808	56.5	34,171	21,932	12,239	55.8	4.1	4.0
Michigan	19,759	15,598	4,161	26.7	19,468	15,264	4,204	27.5	3.2	3.2
Wisconsin	2,039	1,774	265	14.9	2,011	1,735	278	15.9	0.6	0.6
WEST NORTH CENTRAL	42,681	39,489	3,192	8.1	42,747	39,416	3,331	8.6	3.1	3.2
Minnesota	10,276	10,068	208	2.1	10,411	10,404	7	0.1	3.5	3.7
Iowa	6,408	5,109	1,299	25.4	6,635	5,072	1,567	30.9	2.5	2.7
Missouri	12,717	10,706	2,011	18.8	12,359	10,662	1,697	15.9	3.3	3.2
North Dakota	2,086	2,000	86	4.3	2,064	2,000	64	2.7	3.6	3.7
South Dakota	1,682	1,888	-226	-12.0	1,650	1,888	-238	-12.6	2.7	2.8
Nebraska	4,429	4,389	40	0.9	4,403	4,386	17	0.4	2.6	2.6
Kansas	5,103	5,329	-226	-4.2	5,231	6,004	-227	-4.5	2.8	2.9
SOUTH ATLANTIC	59,022	53,430	5,692	10.5	57,604	52,732	4,872	9.2	2.9	2.9
Delaware	1,244	1,250	-6	-0.5	1,226	1,250	-24	-1.9	3.9	3.9
Maryland	7,506	6,187	1,319	21.3	7,260	5,755	1,505	26.2	3.3	3.2
District of Columbia	8,829	6,007	2,822	47.0	8,342	6,007	2,335	38.9	8.2	7.4
Virginia	9,903	8,300	1,603	17.7	9,616	8,200	1,416	15.9	3.1	3.0
West Virginia	4,449	3,089	1,360	44.0	4,558	3,789	769	20.3	2.3	2.4
North Carolina	8,638	9,378	-740	-7.9	8,410	9,413	-1,003	-10.7	2.2	2.2
South Carolina	5,053	5,050	3	0.1	4,980	4,855	125	2.6	2.6	2.6
Georgia	9,448	7,000	2,448	35.0	9,152	6,500	2,652	40.8	2.8	2.8
Florida	8,252	7,139	-887	-12.4	8,060	6,863	-803	-11.7	2.4	2.4
EAST SOUTH CENTRAL	24,101	22,430	1,671	7.4	23,430	21,450	1,980	9.2	2.2	2.1
Kentucky	6,814	6,600	214	3.2	6,720	6,300	420	6.7	2.4	2.4
Tennessee	6,498	8,230	-268	-4.3	6,343	5,600	743	13.3	2.0	2.0
Alabama	8,164	5,800	2,364	40.8	5,904	5,700	204	3.6	2.1	2.0
Mississippi	4,625	3,800	825	21.7	4,463	3,850	613	15.9	2.2	2.2
WEST SOUTH CENTRAL	34,931	30,830	4,301	14.0	33,270	28,882	4,388	15.2	2.5	2.4
Arkansas	4,838	4,800	38	0.8	4,766	4,200	566	13.5	2.7	2.6
Louisiana	7,010	5,061	1,949	38.5	6,984	4,661	2,303	49.4	2.7	2.7
Oklahoma	7,852	6,485	1,367	21.1	7,162	5,886	1,276	21.7	3.7	3.4
Texas	15,231	14,284	947	6.6	14,378	14,135	243	1.7	2.0	1.9
MOUNTAIN	12,681	11,340	1,341	11.8	12,315	10,601	1,714	16.2	2.6	2.7
Montana	1,862	1,957	-95	-4.9	1,847	1,957	-110	-5.6	3.3	3.5
Idaho	1,101	1,080	21	1.9	1,093	1,080	13	1.2	1.9	2.0
Wyoming	628	650	-22	-3.4	608	650	-44	-6.8	2.3	2.3
Colorado	4,938	3,758	1,180	31.4	4,842	3,758	1,084	28.8	4.1	4.0
New Mexico	1,040	930	110	11.8	976	920	56	6.1	1.7	1.7
Arizona	1,515	1,445	70	4.8	1,391	850	541	83.6	2.1	2.0
Utah	1,236	1,220	16	1.3	1,199	1,086	113	10.4	1.6	1.6
Nevada	361	300	61	20.3	361	300	61	20.3	2.3	2.3
PACIFIC	40,833	35,711	5,122	14.3	39,329	34,564	4,765	13.8	2.9	2.8
Washington	6,933	5,239	1,694	32.3	6,862	5,600	1,262	22.5	3.0	3.0
Oregon	4,225	4,173	52	1.2	4,047	3,610	437	12.1	2.8	2.7
California	29,675	26,389	3,286	12.8	28,420	25,354	3,066	12.1	2.9	2.8

<sup>1</sup> minus sign (-) denotes average daily population less than rated capacity.<sup>2</sup> based on average daily resident-patients and estimated civilian population as of July 1, for the corresponding year.

Source: Series P-25, No. 47, Department of Commerce, Bureau of Census.



TABLE 7.--ADMINISTRATIVE STAFF, FULL-TIME, BY OCCUPATION, 1949 AND RATIO OF PATIENTS TO TOTAL STAFF, 1949 AND 1948, STATE HOSPITALS FOR MENTAL DISEASE, BY DIVISION AND STATE

(1949 statistics based on reports from 198 State and 8 Ohio receiving hospitals: 1948 statistics based on reports from 192 State and 8 Ohio receiving hospitals)

DIVISION AND STATE	Total administrative staff	Superintendent	Physicians and Internes	Graduate nurses	Other nurses and attendants	Psychologists and psycho-metrists	Social workers and field workers	Other professional and semi-professional employees <sup>1</sup>	All other employees	Average daily resident-patients <sup>2</sup>	RATIO <sup>3</sup>	1949	1948
UNITED STATES	99,061	185	1,907	4,306	56,100	233	719	3,621	31,981	471,260	4.8	5.2	
NEW ENGLAND	9,907	19	197	567	5,079	39	66	356	3,585	41,558	4.2	4.8	
Maine	592	2	10	19	316	2	4	21	218	2,788	4.7	4.9	
New Hampshire	768	1	17	69	376	3	6	23	243	2,483	3.2	4.0	
Vermont	254	1	3	8	134	1	1	10	96	1,211	4.8	4.8	
Massachusetts	5,653	11	102	319	2,908	15	39	206	2,053	23,663	4.2	5.0	
Rhode Island	549	1	19	38	305	2	5	18	161	3,114	5.7	5.3	
Connecticut	2,091	3	46	114	1,040	16	10	78	784	8,299	4.0	4.4	
MIDDLE ATLANTIC	30,569	38	629	2,078	17,024	34	243	1,266	9,257	129,694	4.2	4.6	
New York	20,264	19	428	1,409	11,938	16	170	903	5,381	81,694	4.0	4.3	
New Jersey	3,114	4	73	179	1,357	5	29	129	1,338	12,127	3.9	4.0	
Pennsylvania	7,191	15	128	490	3,729	13	44	234	2,538	35,873	5.0	5.5	
EAST NORTH CENTRAL	17,698	42	305	617	9,645	75	188	803	6,023	85,759	4.8	5.1	
Ohio	5,003	15	70	192	3,085	26	32	182	1,401	23,526	4.7	4.8	
Indiana	1,470	6	30	17	825	2	7	43	540	9,231	6.3	6.4	
Illinois	6,466	11	131	205	3,013	30	100	400	2,575	35,484	5.5	5.9	
Michigan	4,080	7	57	162	2,351	17	47	156	1,283	15,479	3.8	4.3	
Wisconsin	660	3	17	41	371	--	2	22	224	2,039	3.0	3.4	
WEST NORTH CENTRAL	8,337	25	135	178	5,007	21	28	254	2,689	42,681	5.1	6.1	
Minnesota	1,808	7	27	77	1,106	3	5	66	518	10,275	5.7	7.0	
Iowa	1,311	5	29	26	688	4	12	50	497	6,408	4.9	6.0	
Missouri	2,391	5	22	31	1,520	5	10	54	747	12,717	5.3	5.7	
North Dakota	293	1	5	3	177	1	--	10	96	2,086	7.1	7.6	
South Dakota	334	1	12	2	168	3	1	5	147	1,625	5.5	5.4	
Nebraska	1,098	3	31	27	725	3	--	49	257	4,428	4.0	4.5	
Kansas	1,102	3	11	12	624	4	1	20	427	5,103	4.6	8.0	
SOUTH ATLANTIC	11,655	22	246	491	6,385	29	51	334	4,097	59,022	5.1	5.5	
Delaware	339	1	8	31	169	5	4	34	87	1,244	3.7	4.5	
Maryland	1,230	4	43	9	734	9	20	44	367	7,506	6.1	6.9	
District of Columbia	2,435	1	72	285	1,175	3	7	57	895	6,629	2.7	2.6	
Virginia	1,613	5	21	40	1,009	4	5	30	499	9,603	8.1	6.2	
West Virginia	627	4	18	15	339	2	5	32	212	4,449	7.1	8.2	
North Carolina	1,898	4	36	48	1,008	4	6	48	734	8,638	6.6	5.4	
South Carolina	760	1	12	17	351	--	1	8	370	5,053	6.6	6.8	
Georgia	1,468	22	40	924	--	3	38	440	9,448	9,448	6.4	8.4	
Florida	1,295	1	14	26	676	2	--	43	533	6,252	4.8	5.0	
EAST SOUTH CENTRAL	3,620	11	73	37	2,292	4	11	113	1,079	24,101	6.7	7.6	
Kentucky	1,165	4	28	12	777	--	7	40	297	6,814	5.8	7.8	
Tennessee	731	3	15	4	491	4	--	15	199	6,498	8.9	9.0	
Alabama	908	2	12	4	598	--	--	16	271	6,164	6.8	7.3	
Mississippi	816	2	18	12	426	--	4	42	312	4,625	5.7	6.3	
WEST SOUTH CENTRAL	6,142	15	103	74	3,477	11	38	211	2,213	34,931	5.7	6.3	
Arkansas	1,108	1	23	19	627	1	4	44	389	4,838	4.4	5.0	
Louisiana	1,035	2	15	17	545	1	6	46	403	7,010	6.8	6.5	
Oklahoma	1,363	4	21	14	879	2	3	23	417	7,852	5.8	6.9	
Texas	2,636	8	44	24	1,426	7	25	98	1,004	15,231	5.8	6.6	
MOUNTAIN	2,883	9	67	89	1,627	6	10	105	970	12,681	4.4	4.8	
Montana	392	1	5	11	244	1	--	15	115	1,862	4.8	5.8	
Idaho	227	2	5	16	108	1	4	27	64	1,101	4.9	6.3	
Wyoming	115	1	1	4	67	1	1	2	38	628	5.5	6.4	
Colorado	1,237	1	40	33	683	--	2	35	443	4,998	4.0	4.2	
New Mexico	264	1	4	5	130	2	1	16	5	1,040	3.9	3.2	
Arizona	359	1	7	11	205	--	1	13	121	1,515	4.2	5.5	
Utah	234	1	5	7	158	1	1	8	53	1,236	5.3	5.2	
Nevada	55	1	--	2	32	--	--	--	20	361	6.6	6.1	
PACIFIC	8,250	14	152	174	5,564	14	85	179	2,068	40,833	4.9	5.9	
Washington	1,285	3	30	37	769	3	6	35	402	6,933	5.4	5.4	
Oregon	851	3	18	39	541	2	17	23	14	4,226	3.1	3.8	
California	6,114	9	104	100	4,254	9	76	127	1,435	29,675	4.9	6.0	

<sup>1</sup>Includes dentists, dental assistants, pharmacists, clinical assistants, laboratory and X-ray technicians, dietitians, therapists and assistants, principals of schools, teachers of grade and special subjects.

<sup>2</sup>Includes only population of hospitals reporting administrative staff.

<sup>3</sup>Patients per full-time employee.

TABLE 8.--EXPENDITURES BY PURPOSE OF EXPENDITURE, AND PER CAPITA MAINTENANCE EXPENDITURE  
STATE MENTAL HOSPITALS: 1949  
(1949 statistics based on reports from 197 State and 8 Ohio receiving hospitals)  
and on average daily resident-patient population of hospitals reporting expenditures.

DIVISION AND STATE	EXPENDITURES BY PURPOSE: 1949 <sup>a</sup> (in thousands of dollars)									
	EXPENDITURES FOR MAINTENANCE									
	Total	Salaries and wages	Provisions	Fuel	Other					
					Light	and	Other	Improvements	Expenditures	
UNITED STATES	\$404,687.5	\$338,727.1	\$195,530.3	\$72,084.9	\$21,120.2	\$49,991.7	\$65,960.4			
NEW ENGLAND	37,459.3	33,351.2	19,797.6	6,396.1	2,809.2	4,654.2	4,144.1			
MAINE	2,164.4	1,668.9	910.9	462.9	148.0	347.1	205.5			
NEW HAMPSHIRE	2,930.7	2,038.8	967.8	441.2	194.8	462.1	891.8			
VERMONT	789.8	749.7	446.5	103.2	65.1	133.0	40.1			
MASSACHUSETTS	19,497.5	12,110.2	12,110.2	1,647.1	2,474.1	77.5	2,809.8			
CONNECTICUT	10,900.5	7,496.6	4,283.5	1,032.6	557.7	1,023.8	2,809.8			
NEW JERSEY	9,765.0	6,100.6	7,907.7	1,341.7	1,427.4	3,032.8	247.3			
PENNSYLVANIA	26,966.4	23,595.1	12,738.6	5,667.9	1,638.0	3,032.8	3,361.3			
NEW YORK	83,076.7	79,626.2	53,802.7	14,485.2	4,435.2	5,903.2	4,450.6			
MIDDLE ATLANTIC	119,788.2	111,729.0	72,641.8	21,514.8	6,709.0	10,863.4	9,059.2			
OHIO	21,975.5	19,451.8	8,679.9	3,397.1	1,055.9	2,019.0	6,523.6			
INDIANA	3,454.8	4,207.6	1,942.9	1,000.9	386.7	877.1	6,523.6			
ILLINOIS	32,447.5	17,265.7	13,362.7	6,654.2	1,300.8	1,856.6	4,039.0			
MICHIGAN	19,119.1	14,080.0	9,006.7	2,103.1	764.7	1,856.6	1,030.4			
WISCONSIN	3,947.7	2,317.2	1,510.5	271.6	190.2	344.9	1,030.4			
MINNESOTA	6,532.6	5,171.2	3,131.0	904.5	387.5	748.2	361.4			
NEBRASKA	4,344.0	3,617.0	1,890.1	848.3	326.5	562.4	727.0			
MISSOURI	9,126.7	7,755.0	3,441.7	1,739.0	664.0	1,070.6	1,211.5			
NORTH DAKOTA	1,026.7	1,001.7	204.3	204.3	85.0	202.6	29.0			
SOUTH DAKOTA	3,346.5	2,911.6	1,688.2	650.0	148.7	468.7	434.9			
NEBRASKA	2,611.5	2,534.8	1,249.8	671.5	169.5	450.0	76.7			
WEST ATLANTIC	45,765.6	38,568.3	20,080.5	9,684.3	2,233.0	6,570.4	7,197.3			
MARYLAND	927.9	913.4	445.1	224.4	56.4	147.7	14.6			
DISTRICT OF COLUMBIA	5,434.0	4,940.5	2,311.2	1,374.3	403.0	852.1	493.5			
VIRGINIA	6,809.4	4,867.6	2,034.5	1,024.8	327.0	769.4	1,091.8			
NORTH CAROLINA	7,165.2	6,113.2	2,906.0	1,287.2	350.4	1,569.6	1,030.0			
GEORGIA	4,504.5	3,732.6	1,028.1	871.3	157.1	676.5	825.9			
FLORIDA	5,090.6	3,986.6	1,860.8	1,313.3	275.4	537.1	1,104.0			
WEST SOUTH CENTRAL	11,335.1	9,901.9	3,954.2	2,918.1	475.0	2,554.6	1,433.2			
TENNESSEE	2,599.6	2,037.9	1,235.2	734.6	(2)	1,312.7	21.7			
MISSISSIPPI	1,853.6	1,836.1	702.9	566.1	102.2	464.9	17.5			
LOUISIANA	2,469.8	2,075.8	1,065.0	681.0	173.0	463.2	1,394.1			
ARKANSAS	2,703.0	2,459.4	1,078.2	499.3	116.2	771.0	1,243.6			
OKLAHOMA	4,016.6	3,617.1	1,401.2	1,099.9	171.3	944.6	689.5			
TEXAS	8,306.1	7,707.4	3,076.0	2,494.5	274.9	1,662.0	601.6			
MOUNTAIN	10,269.4	8,872.2	5,292.4	1,454.7	436.4	1,688.6	1,397.2			
MONTANA	1,827.5	1,108.6	642.6	342.2	40.2	83.5	718.9			
IDAHO	746.8	694.2	355.0	115.8	62.6	100.8	62.6			
WYOMING	483.1	397.5	204.9	63.1	25.4	58.7	85.7			
UTAH	2,000.7	2,055.8	1,051.7	558.4	176.4	144.9	144.9			
NEW MEXICO	801.0	779.5	379.7	128.6	50.4	210.8	21.4			
ARIZONA	1,128.8	1,089.9	665.1	114.9	34.9	285.0	34.9			
NEVADA	493.7	445.6	230.7	81.1	39.8	186.1	16.2			
PACIFIC	52,297.9	32,293.2	19,893.1	6,458.7	1,619.0	5,063.8	20,004.3			
CALIFORNIA	4,388.4	4,955.4	2,468.1	1,455.0	174.6	507.7	1,942.6			
WASHINGTON	7,375.9	6,954.4	3,481.1	1,800.9	403.7	589.0	2,979.9			
OREGON	4,388.4	2,545.8	1,455.0	408.5	174.6	507.7	1,942.6			

TABLE 8.--EXPENDITURES BY PURPOSE OF EXPENDITURE, AND PER CAPITA MAINTENANCE EXPENDITURE  
STATE MENTAL HOSPITALS: 1949--Continued

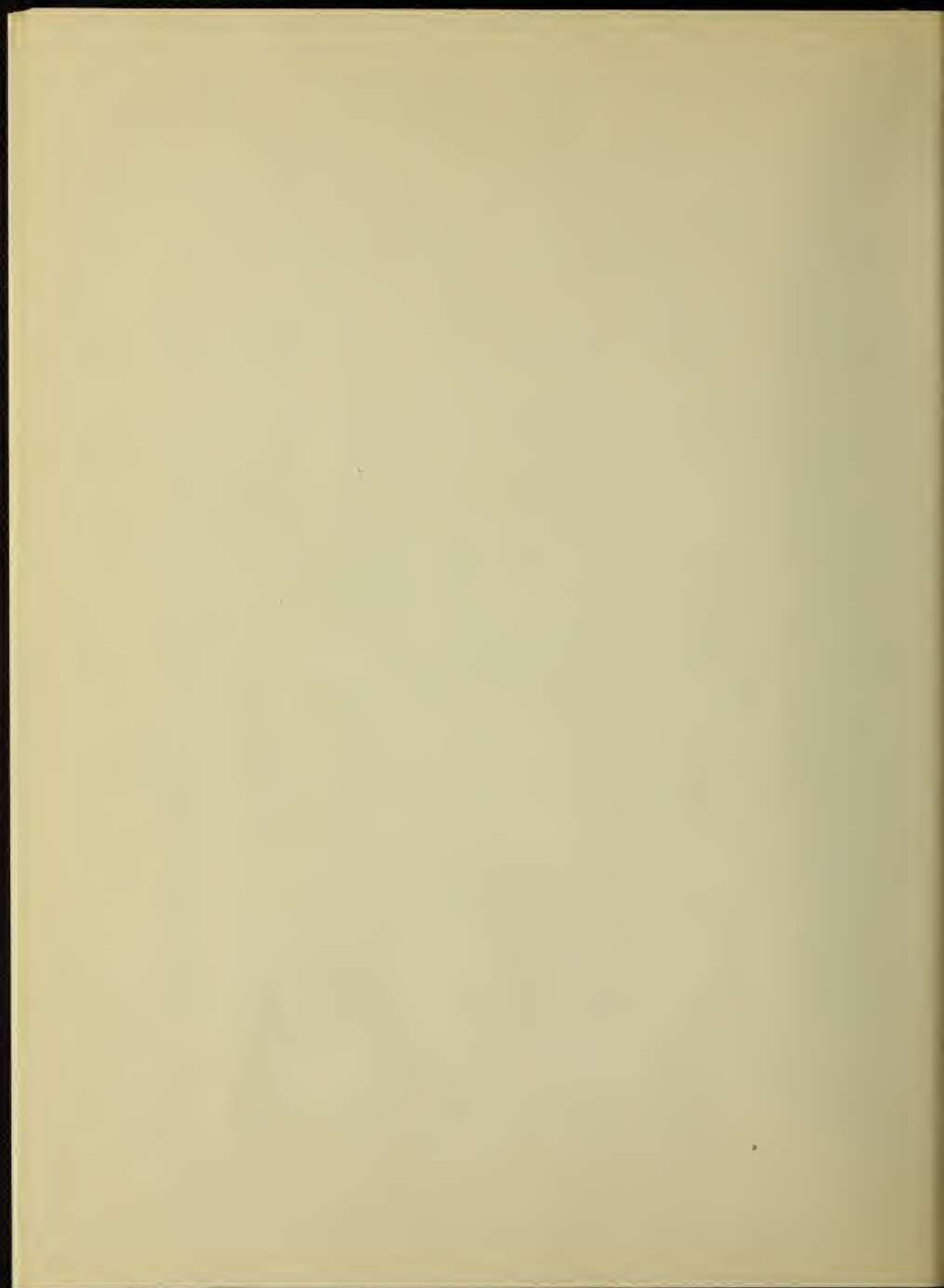
(1949 statistics based on reports from 197 State and 8 Ohio receiving hospitals; 1948 statistics based on reports from 192 State and 8 Ohio receiving hospitals)

DIVISION AND STATE	PERCENTAGE DISTRIBUTION OF MAINTENANCE EXPENDITURES <sup>1</sup>				Average daily resident- patients	PER CAPITA MAINTENANCE EXPENDITURES <sup>2</sup>	
	Salaries and wages	Purchased provisions	Fuel, light and water	Other maintenance		1949	1948
UNITED STATES	57.7	21.3	6.2	14.8	470,914	\$719.30	\$659.13
NEW ENGLAND	59.4	19.2	7.5	14.0	41,558	802.52	686.22
Maine	48.7	24.8	7.9	18.6	2,788	670.33	611.53
New Hampshire	47.5	20.8	9.1	22.7	2,483	821.12	765.45
Vermont	69.5	14.0	8.7	17.7	1,211	619.07	621.65
Massachusetts	62.4	15.9	8.0	12.7	23,663	820.69	671.79
Rhode Island	60.4	27.5	(2)	12.1	3,114	570.67	515.92
Connecticut	57.1	21.8	7.4	13.6	8,299	903.32	800.45
MIDDLE ATLANTIC	55.0	19.3	6.0	9.7	129,594	861.48	776.99
New York	68.4	18.4	5.6	7.5	91,694	962.45	859.14
New Jersey	64.2	14.1	6.7	15.0	12,127	784.01	713.36
Pennsylvania	54.0	24.1	6.9	15.0	35,873	657.74	612.64
EAST NORTH CENTRAL	55.0	21.3	7.3	16.4	85,413	741.37	725.04
Ohio	56.2	22.0	8.8	13.1	23,526	556.80	634.62
Indiana	46.2	23.8	9.2	20.8	8,885	473.57	404.64
Illinois	49.0	24.4	7.1	19.5	35,484	758.39	739.39
Michigan	55.1	15.3	5.4	13.2	15,479	909.62	845.01
Wisconsin	65.2	11.7	8.2	14.9	2,039	1,136.46	907.70
WEST NORTH CENTRAL	53.1	22.5	8.0	16.4	42,681	539.49	479.11
Minnesota	50.5	17.5	7.5	14.5	10,276	503.23	461.07
Iowa	52.3	23.5	9.0	15.3	6,408	554.46	494.86
Missouri	49.8	25.1	9.6	15.5	12,717	543.78	480.04
North Dakota	50.9	28.4	8.5	20.2	2,086	490.18	426.88
South Dakota	38.3	21.7	6.9	33.2	1,662	525.25	429.48
Nebraska	57.3	21.5	5.1	16.1	4,429	657.39	618.19
Kansas	49.3	26.5	5.4	17.8	5,103	496.73	388.65
SOUTH ATLANTIC	52.1	25.1	5.8	17.0	59,022	553.45	615.41
Delaware	53.1	24.5	6.2	16.2	1,244	734.27	695.91
Maryland	46.8	27.6	8.2	17.2	7,506	658.20	603.00
District of Columbia	72.6	14.6	3.4	9.4	6,629	1,454.29	1,406.75
Virginia	47.8	30.9	5.6	15.8	9,803	496.54	520.69
West Virginia	42.1	30.7	5.1	22.1	4,449	394.48	404.11
North Carolina	47.3	21.7	5.7	25.7	8,638	707.71	625.25
South Carolina	37.6	31.9	5.8	24.7	5,053	540.78	487.99
Georgia	39.5	32.2	8.3	20.1	9,448	383.04	346.58
Florida	46.7	32.9	6.9	13.5	6,252	537.55	591.88
EAST SOUTH CENTRAL	39.9	29.5	4.8	25.8	24,101	410.85	383.63
Kentucky	48.3	(2)	(2)	51.7	6,814	372.45	392.52
Tennessee	33.0	36.4	8.3	22.3	6,498	319.45	307.48
Alabama	38.8	46.3	5.8	9.1	6,164	560.04	490.43
Mississippi	38.3	30.8	5.6	25.3	4,625	397.00	336.67
WEST SOUTH CENTRAL	40.8	29.5	4.0	25.9	34,931	485.60	432.11
Arkansas	43.8	20.1	4.7	31.3	4,838	508.35	451.05
Louisiana	41.8	28.6	3.7	25.9	7,010	453.46	373.86
Oklahoma	38.7	30.4	4.7	26.1	7,852	460.85	475.50
Texas	39.9	32.4	3.6	24.2	15,231	606.03	432.54
MOUNTAIN	59.7	16.4	4.9	19.0	12,681	699.64	667.08
Montana	58.0	30.9	3.6	7.5	1,862	585.37	564.39
Idaho	51.1	16.7	9.0	23.2	1,101	630.50	555.91
Wyoming	40.4	14.1	6.4	38.0	638	638.93	468.55
Colorado	65.0	14.6	4.7	15.7	4,938	766.67	723.24
New Mexico	48.7	17.8	5.5	27.0	1,040	749.56	758.51
Arizona	60.1	10.5	3.2	26.1	1,515	719.40	787.41
Utah	62.8	10.5	4.7	22.0	1,236	684.14	579.22
Nevada	62.8	25.8	3.9	7.5	361	473.94	598.48
PACIFIC	60.2	19.6	4.9	15.3	40,833	808.01	701.92
Washington	57.0	27.2	8.1	7.7	6,933	720.53	681.15
Oregon	57.2	16.0	6.9	19.9	4,225	602.56	524.35
California	61.1	18.4	4.1	16.4	29,675	857.70	732.22

<sup>1</sup>Figures may not add to totals because of rounding.

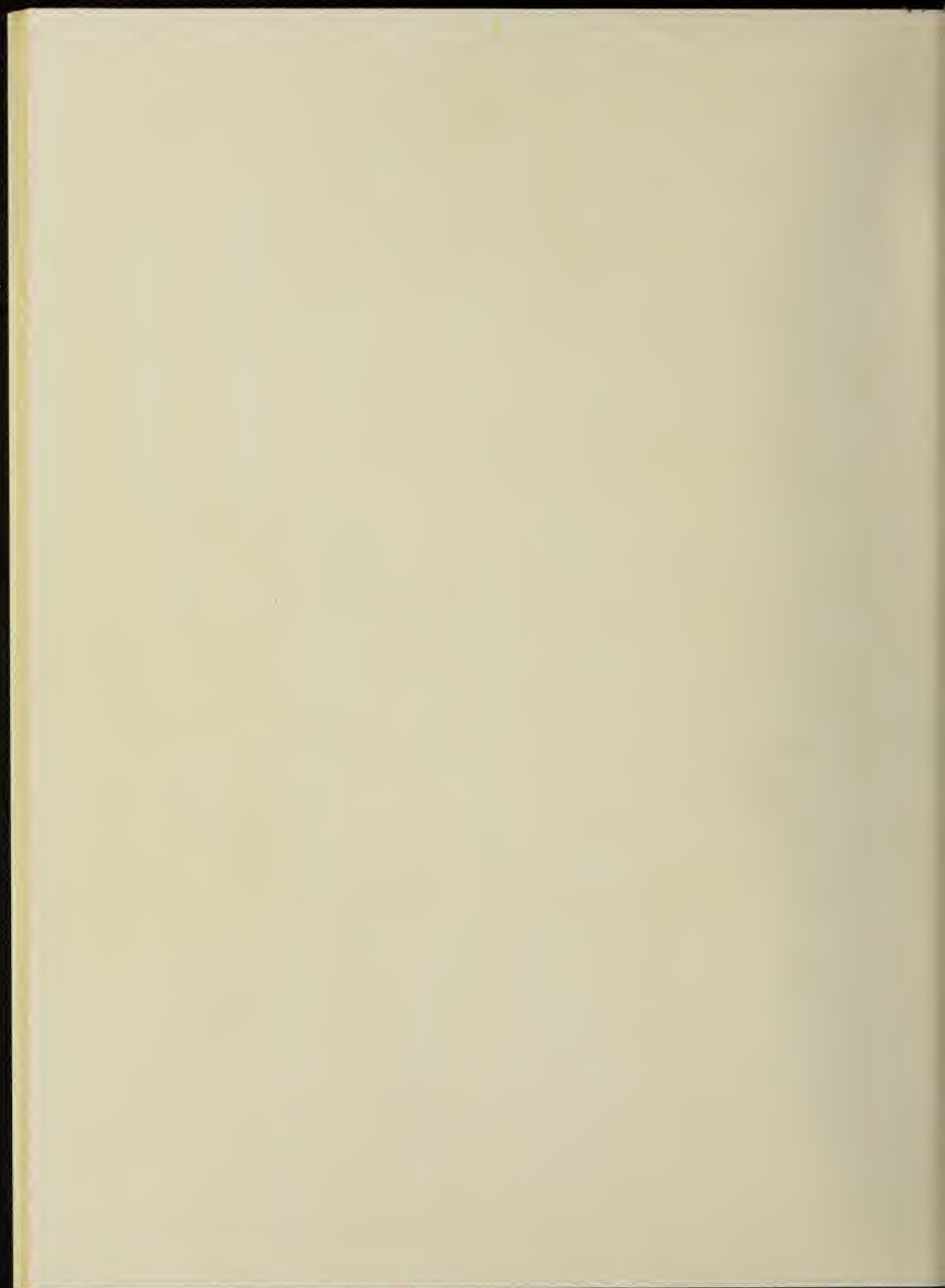
<sup>2</sup>Data not reported.

<sup>3</sup>Based on average daily resident-patient population of hospitals reporting expenditures.





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# MENTAL HEALTH STATISTICS

## Current Reports

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

MAY 1953

BETHESDA 14, MARYLAND

SERIES IMH-B53, No. 2

### PATIENTS IN PUBLIC HOSPITALS FOR THE PROLONGED CARE OF THE MENTALLY ILL, 1951

This is the second in a series of reports presenting summarized information<sup>1</sup> on the State and county hospitals for the prolonged care of the men-

tally ill in the United States.<sup>2</sup> The first report published in December of 1952 (Series IMH-B53, No. 1) dealt with data for the year 1950.

### AVERAGE DAILY RESIDENT PATIENTS IN PUBLIC HOSPITALS FOR MENTAL DISEASE PER 1,000 CIVILIAN POPULATION: 1951

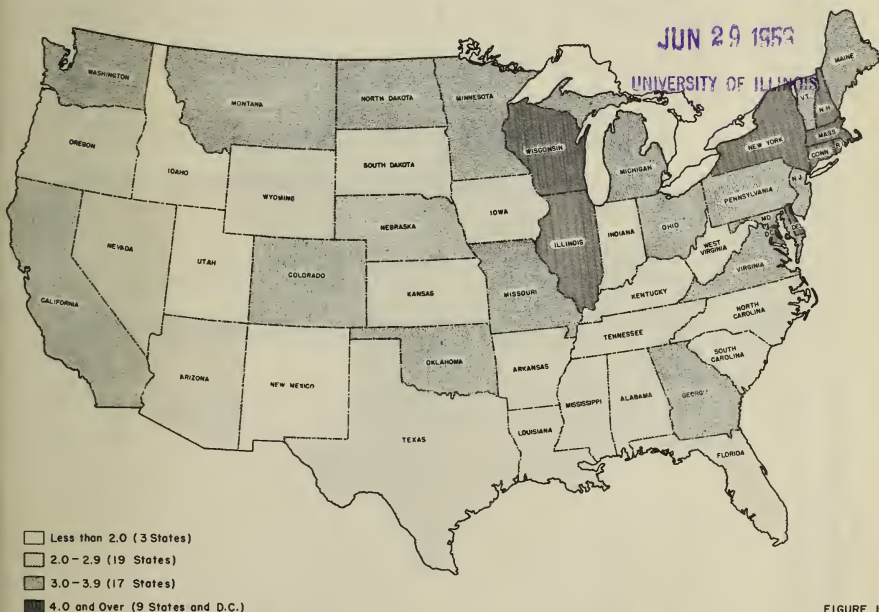


FIGURE 1

<sup>1</sup>Data are based on preliminary tabulations made for the hospitals reporting in the 1951 Census of Patients in Mental Institutions. Final editing and tabulation of these data may subject them to revision when prepared for final publication.

<sup>2</sup>This report does not include data for neuropsychiatric patients in Veterans Administration hospitals. Data by State of residence or for first admission status were not available. All admissions of these

Continued on page 4

SUMMARY DATA AND RATES FOR PATIENTS AND PER CAPITA MAINTENANCE EXPENDITURES IN PUBLIC HOSPITALS FOR THE PROLONGED CARE OF THE MENTALLY ILL:  
UNITED STATES AND EACH STATE, 1951

STATE	FIRST ADMISSIONS		ALL ADMISSIONS (EXCEPT TRANSFERS)		DISCHARGES		DEATHS IN HOSPITAL		PATIENTS ON BOOKS AT END OF YEAR		AVERAGE DAILY RESIDENT PATIENT POPULATION		Per capita maintenance expenditures <sup>a</sup>
	Number	Rate <sup>1</sup>	Number	Rate <sup>2</sup>	Number	Rate <sup>3</sup>	Number	Rate <sup>4</sup>	Number	Rate <sup>5</sup>	Number	Rate <sup>5</sup>	
UNITED STATES-----	108,778	72.0	146,506	97.0	90,260	150.0	42,027	64.1	610,458		515,108	3.4	\$825.62
Alabama-----	1,383	46.2	1,982	66.2	1,375	186.7	477	56.2	7,430		6,592	2.2	552.75
Arizona-----	731	92.6	918	116.3	651	342.8	140	56.6	1,959		1,559	2.0	845.14
Arkansas-----	1,229	64.9	1,948	90.9	1,448	285.9	333	49.3	6,234		5,421	2.5	634.08
California-----	10,229	86.6	13,522	127.0	9,650	232.8	2,769	60.3	42,043		32,821	3.1	943.08
Colorado-----	1,078	50.8	1,527	80.0	1,078	150.0	270	70.0	5,883		5,227	3.9	933.23
Connecticut-----	2,080	102.7	3,078	151.9	2,013	203.1	870	75.1	10,004		8,668	4.3	1,048.52
Delaware-----	367	112.9	497	152.9	349	192.7	91	49.9	1,689		1,339	4.1	907.18
District of Columbia-----	1,088	141.1	1,412	183.1	928	131.7	424	52.3	7,078		6,760	8.8	1,531.86
Florida-----	1,008	35.0	1,270	44.1	612	85.6	361	45.8	7,549		6,678	2.3	732.60
Georgia-----	2,037	59.9	2,660	78.3	1,378	115.7	772	61.0	12,165		10,077	3.0	522.24
Idaho-----	462	78.6	650	110.5	419	233.0	131	73.6	1,474		1,144	1.9	848.33
Illinois-----	8,325	95.2	12,619	144.3	8,302	205.1	3,495	71.6	40,804		36,637	4.2	836.67
Indiana-----	1,614	40.4	1,922	48.1	878	85.0	751	65.7	10,458		9,625	2.4	554.23
Iowa-----	81,260	48.0	1,720	65.5	869	135.0	830	79.8	9,549		8,590	2.2	870.68
Kansas-----	541	28.1	724	37.7	531	94.9	229	40.7	5,558		4,915	2.6	928.82
Kentucky-----	1,427	50.4	1,865	65.8	1,289	157.5	553	62.3	8,197		7,257	2.6	472.78
Louisiana-----	1,479	54.4	1,902	69.9	1,343	149.9	370	40.2	9,045		7,301	2.7	480.51
Maine-----	535	60.5	744	84.1	456	148.2	229	65.3	3,111		2,613	3.2	723.46
Maryland-----	1,240	52.5	1,601	76.3	1,182	127.0	362	37.6	9,475		8,168	3.5	870.52
Massachusetts-----	5,325	114.0	7,208	154.3	4,795	178.0	2,305	74.9	26,852		23,673	5.1	1,006.25
Michigan-----	2,127	73.2	2,742	104.4	1,952	184.0	1,054	66.1	12,505		10,852	3.6	1,001.75
Minnesota-----	2,367	79.2	3,555	102.2	1,985	152.2	946	69.1	12,595		10,155	2.4	509.10
Mississippi-----	2,285	105.6	2,739	126.6	1,285	182.0	367	47.2	7,432		5,152	2.4	689.35
Missouri-----	1,626	40.6	2,066	51.6	1,171	86.8	747	52.2	13,564		12,221	3.1	689.35
Montana-----	423	72.4	469	80.3	480	98.7	156	65.5	4,717		1,930	3.3	800.82
Nebraska-----	1,124	83.8	1,392	103.7	768	131.4	318	53.0	5,998		4,551	3.4	914.30
Nevada-----	144	86.7	187	100.6	118	268.8	21	39.5	453		374	2.3	851.94
New Hampshire-----	751	141.4	993	187.0	590	195.9	331	92.6	3,048		2,568	4.8	1,031.93
New Jersey-----	4,710	96.1	6,458	131.8	3,734	169.9	2,021	79.4	22,261		19,034	3.9	886.04
New Mexico-----	336	49.2	549	51.1	359	111.6	57	41.2	1,486		1,120	1.6	656.70
New York-----	15,315	102.3	20,735	139.6	10,942	111.4	7,478	70.2	98,352		87,045	5.8	993.66
North Carolina-----	2,332	57.8	2,752	69.2	1,740	159.0	514	43.5	11,184		9,205	2.3	809.72
North Dakota-----	436	72.2	540	89.4	350	146.8	172	65.0	2,389		2,085	3.5	595.01
Ohio-----	4,785	59.5	6,746	83.8	4,135	140.5	1,897	60.4	23,788		24,729	3.1	722.77
Oklahoma-----	1,387	62.2	2,047	91.8	1,301	148.0	525	54.2	7,401		6,902	3.5	681.32
Oregon-----	1,545	99.6	2,038	131.4	1,427	262.5	486	75.9	5,478		4,414	2.8	794.50



Pennsylvania-----	5,545	52.7	7,089	67.4	3,644	85.2	2,582	58.7	43,233	37,059	3.5	777.59
Rhode Island-----	1,027	135.9	1,451	189.2	917	226.2	346	74.3	4,141	3,250	4.2	436.54
South Carolina-----	1,541	75.4	1,983	97.0	1,577	243.6	393	53.8	6,481	5,320	2.6	541.20
South Dakota-----	368	57.4	498	77.7	372	219.6	160	75.2	1,677	1,695	2.6	833.27
Tennessee-----	1,566	47.5	2,220	67.3	1,465	191.8	544	56.0	7,740	7,597	2.3	376.95
Texas-----	3,335	43.0	4,334	55.9	1,974	93.9	1,235	61.2	21,661	16,211	2.1	758.93
Utah-----	305	43.4	436	62.0	302	206.1	111	85.0	1,476	1,270	1.8	699.59
Vermont-----	187	98.7	225	141.1	223	370.6	85	66.4	1,899	1,576	2.1	422.68
Virginia-----	1,775	78.4	2,263	96.6	1,511	181.9	739	84.5	11,891	9,272	3.1	560.46
Washington-----	1,437	78.4	2,263	96.6	1,511	181.9	739	84.5	6,261	7,227	3.1	723.98
West Virginia-----	1,438	72.1	2,086	104.6	1,246	213.8	362	53.4	6,033	4,746	2.4	535.10
Wisconsin-----	3,379	97.9	4,451	128.9	2,575	167.7	1,151	82.6	15,440	14,165	4.1	710.80
Wyoming-----	134	47.0	200	70.2	118	168.3	68	81.6	705	643	2.3	797.67

<sup>1</sup>Number of first admissions per 100,000 of the estimated civilian population as of July 1.

<sup>2</sup>Number of admissions per 100,000 of the estimated civilian population as of July 1.

<sup>3</sup>Number of discharges per 1,000 average patients on the hospital books during the year. This average was obtained by computing the average of the number of patients on books at the beginning and end of the year.

<sup>4</sup>Number of deaths per 1,000 patients under treatment during the year. Patients under treatment was obtained by adding all admissions (excluding transfers) to the number of resident patients at the beginning of the year.

<sup>5</sup>Number of average daily resident-patient population of hospitals reporting expenditures.

<sup>6</sup>Based on average daily resident-patient population of hospitals reporting expenditures.

<sup>7</sup>Included in the statistics presented are the following data for the respective county systems in the United States and each State:

STATE	First admissions	All admissions (except transfers)	Discharges	Deaths in hospital	Patients on books at end of year	Average daily resident patient population	Per capita maintenance expenditures
TOTAL-----	3,940	4,893	2,482	2,302	23,962	20,148	\$730.79
California-----	596	667	273	452	1,087	1,069	1,281.06
Iowa-----	---	---	---	---	2,226	---	---
New Jersey-----	1,493	1,862	1,022	784	7,697	6,136	959.75
Tennessee-----	282	354	57	88	1,897	632	586.11
Wisconsin-----	1,569	1,990	950	978	12,470	12,049	559.52

<sup>8</sup>Data for the Iowa County hospitals were not available

SYMBOLS USED:

Data not available—three dashes [---].

SOURCES:

Data based on reports from 201 State and 111 county hospitals for mental disease for the 1951 Census of Mental Patients. Data on expenditures were available from 193 of the State hospitals and 41 of the county hospitals. However, the hospitals reporting expenditures represented 99.7 percent and 86.0 percent of the total average daily resident patient populations reported for the State and county hospitals, respectively.

Estimated civilian population as of July 1, 1951, from Current Population Reports, Population Estimates Series P-25, Number 62, U. S. Department of Commerce, Bureau of the Census, Washington, D. C.

Over 610,000 persons were in the hospital or in some form of extramural care at the end of 1951 as compared to about 598,000 in 1950. This represents an increase of about two percent.

The average number of patients in daily residence during the year was 515,108, an increase of 1.9 percent over the corresponding number of 505,419 in 1950. Of these patients, 96.1 percent were in State hospitals, and only 3.9 percent in county hospitals. However, in States with county mental hospital systems, the patients resident in the county mental hospitals represent a significant portion of the mentally ill hospitalized in public hospitals. In terms of the rate per 1,000 estimated civilian population, 3.4 persons were hospitalized, on the average, for each 1,000 estimated persons in the civilian population on any given day; this rate varied among the 48 States and the District of Columbia from a low of 1.6 to a high of 8.8. The median rate was 3.1. Figure 1 shows the distribution of these rates by State. It is evident that the Southern and Western States have low ratios as compared to the Northern

and Eastern ones.

The average rate of first admissions to public mental hospitals was 72.0 per 100,000 estimated civilian population, a decrease of 1.1 percent as compared to the 1950 rate. The median rate in 1951 was 64.9, with a range from a low of 28.1 to a high of 141.4. In 1950 the median rate was 64.2, with a range of 27.0 to 163.7.

The rate of discharge per 1,000 average patients on hospital books for the United States was 150.0, a one percent increase over the 1950 rate. However, the median rate was 167.7, with a range from 81.6 to 342.8, as compared to the 1950 median rate of 160.1, with a range from 29.0 to 427.1.

The average death rate also showed a slight increase, 64.1 per 1,000 patients under treatment during the year, as compared to 63.8 in 1950. The range was somewhat broader than it was in 1950; the median death rate in 1951 was 62.3, with a range from 37.6 to 92.6, as compared to the 1950 median of 61.0, with a range from 42.9 to 86.9.

Per capita maintenance expenditure for the United States was \$825.62 per year, or \$2.26 per patient per day, as compared to \$2.12 in 1950.

The median expenditure was \$777.59, with a range of \$376.95 to \$1,591.86. On a daily per capita basis the median would be \$2.14, with a range of \$1.03 to \$4.36 per day.

(Continued from page 1)

patients, including transfers, to the Veterans Administration hospitals totaled 43,540; total discharges were 41,958; deaths in hospital were 2,421; and total patients on books at end of year were 56,977.

# MENTAL HEALTH STATISTICS

## Current Reports

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

AT 1954

BETHESDA 14, MARYLAND

SERIES IMH-B54, NO. 1

### PATIENTS IN PUBLIC HOSPITALS FOR THE PROLONGED CARE OF THE MENTALLY ILL, 1952

This is the third in a series of reports presenting summarized information<sup>1</sup> on the State and county hospitals for the prolonged care of the mentally ill in the

United States.<sup>2</sup> Prior reports, Series IMH-B53 Nos. 1 and 2, dealt with data for the years 1950 and 1951, respectively.

### AVERAGE DAILY RESIDENT PATIENTS IN PUBLIC HOSPITALS FOR MENTAL DISEASE PER 1,000 CIVILIAN POPULATION: 1952

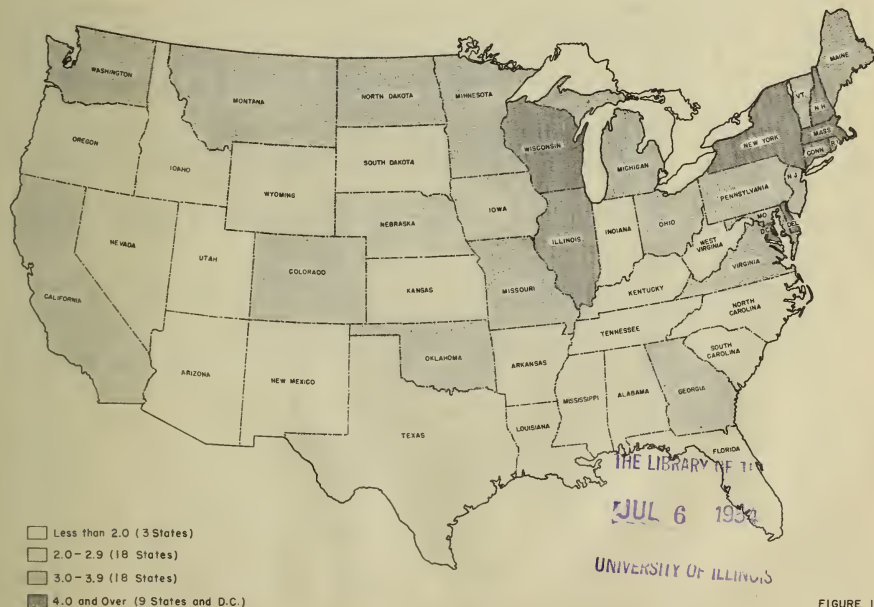


FIGURE 1

<sup>1</sup>Data are based on preliminary tabulations made for the hospitals reporting in the 1952 Census of Patients in Mental Institutions. Final editing and tabulation of these data may subject them to revision when pre-

pared for final publication.

<sup>2</sup>This report does not include data for neuropsychiatric patients in Veterans Administration hospitals.

SUMMARY DATA AND RATES FOR PATIENTS AND PER CAPITA MAINTENANCE EXPENDITURES IN PUBLIC HOSPITALS FOR THE PROLONGED CARE OF THE MENTALLY ILL  
UNITED STATES AND EACH STATE, 1952

STATE	FIRST ADMISSIONS		ALL ADMISSIONS (EXCEPT TRANSFERS)		DISCHARGES		DEATHS IN HOSPITAL		Patients on books at end of year	AVERAGE DAILY RESIDENT PATIENT POPULATION		Per capita maintenance expenditures <sup>6</sup>
	Number	Rate <sup>1</sup>	Number	Rate <sup>2</sup>	Number	Rate <sup>3</sup>	Rate <sup>4</sup>			Number	Rate <sup>5</sup>	
							Number	Rate <sup>4</sup>				
UNITED STATES <sup>7</sup>	113,995	74.3	157,185	102.5	99,959	180.6	44,223	65.3	622,700	520,342	3.4	\$937.08
Alabama	1,345	44.1	1,973	64.6	1,308	173.6	457	53.0	7,638	6,775	2.2	655.93
Arizona	1,597	82.0	2,106	98.1	1,328	436.2	154	64.1	4,910	4,360	1.9	914.44
Arkansas	1,494	81.9	2,106	113.4	1,756	232.9	405	60.2	6,179	4,638	2.5	797.12
California	11,559	104.2	15,193	136.9	10,418	242.6	2,972	61.3	43,847	33,883	3.1	1,026.59
Colorado	445	32.1	628	45.3	459	76.4	493	84.2	6,032	5,239	3.6	984.04
Connecticut	2,097	99.9	3,193	151.6	2,149	213.7	928	78.6	10,107	9,919	4.2	1,163.94
Delaware	403	117.9	539	157.6	356	199.9	113	59.5	1,910	1,390	4.1	1,035.76
District of Columbia	1,064	137.4	1,438	182.3	914	113.4	431	52.3	7,271	6,915	6.9	1,740.77
Florida	1,197	38.7	1,497	47.6	839	92.6	411	49.7	7,909	7,132	2.4	912.54
Georgia	2,134	62.3	2,762	60.6	1,599	139.4	772	59.2	13,568	10,475	3.1	397.58
Idaho	545	93.3	796	136.3	639	432.6	133	67.7	1,490	1,142	2.0	932.55
Illinois	8,624	96.6	14,187	159.3	10,021	244.5	3,987	75.6	41,091	37,115	4.2	951.99
Indiana	2,050	49.8	2,435	59.1	1,270	119.5	769	63.6	10,812	9,779	2.4	751.76
Iowa	1,971	64.1	2,475	87.3	1,753	184.2	674	65.4	9,448	7,991	3.1	979.09
Kansas	631	32.6	847	43.7	632	114.6	300	53.2	5,446	4,849	2.5	1,157.91
Kentucky	1,414	49.3	1,930	67.3	1,293	157.5	586	64.6	8,284	7,304	2.5	540.69
Louisiana	1,496	55.2	1,903	70.3	1,550	166.9	438	47.3	9,966	7,520	2.7	501.35
Maine	543	61.5	755	85.5	459	145.1	213	59.5	3,200	2,856	3.2	831.17
Maryland	1,827	66.6	2,334	95.5	1,416	144.7	497	46.9	10,012	9,218	3.4	987.72
Massachusetts	5,204	110.8	7,227	153.9	4,847	180.4	2,377	77.5	23,898	23,619	5.0	1,231.33
Michigan	3,953	53.4	4,805	69.1	2,493	94.6	1,512	61.6	26,522	20,350	3.1	1,155.17
Minnesota	3,155	104.8	4,033	139.3	2,519	196.5	1,147	77.1	13,099	11,184	3.7	1,023.82
Mississippi	2,400	112.4	3,613	169.3	2,165	302.4	504	57.3	7,559	5,017	2.9	455.84
Missouri	1,638	41.6	2,118	53.7	1,219	89.7	876	60.7	13,598	12,279	3.1	870.14
Montana	542	91.6	600	101.4	1,019	273.4	197	77.2	3,324	1,944	3.3	986.59
Nebraska	787	58.6	1,317	98.0	1,049	179.6	345	57.9	5,830	4,568	3.4	1,069.77
Nevada	155	87.1	180	101.1	119	254.3	30	52.1	484	392	2.2	645.60
New Hampshire	768	145.5	1,020	193.2	582	185.6	292	72.9	3,224	2,616	5.0	1,167.07
New Jersey	5,043	100.4	6,891	136.9	4,039	179.2	2,143	61.4	22,773	19,466	3.9	995.21
New Mexico	293	41.6	306	43.0	65	94.9	93	66.2	1,611	1,309	1.6	1,062.10
New York	14,895	99.1	20,457	136.1	10,933	110.3	7,539	69.9	99,892	69,476	5.9	1,124.35
North Carolina	2,605	63.6	3,013	83.9	2,045	179.7	996	45.6	11,572	9,478	2.9	862.38
North Dakota	363	69.6	469	82.9	353	147.6	136	52.7	2,394	2,091	3.5	561.99
Ohio	5,060	61.3	7,143	86.6	4,196	137.9	1,917	60.0	30,911	25,442	3.1	800.43
Oklahoma	2,577	69.9	3,478	104.1	1,324	146.6	666	66.2	9,163	7,992	3.6	955.35
Oregon	1,766	110.5	2,447	153.1	1,429	232.7	595	82.6	5,931	4,504	2.8	846.24



Pennsylvania-----	5,774	54.9	7,328	69.7	3,729	85.2	2,529	59.7	44,345	37,598	3.6	880.17
Rhode Island-----	929	118.8	1,410	180.3	982	234.9	350	74.4	4,219	3,346	4.3	719.52
South Carolina-----	1,483	69.9	1,960	92.4	1,397	212.5	376	51.5	6,668	5,369	2.5	593.64
South Dakota-----	438	97.4	597	91.8	409	238.0	118	50.9	1,748	1,695	2.6	---
Tennessee-----	1,599	49.4	2,282	69.3	1,535	200.9	601	61.8	7,698	7,691	2.4	459.32
Texas-----	3,501	44.0	4,959	59.6	2,487	111.3	1,094	52.4	22,953	16,844	2.1	693.32
Utah-----	320	43.7	428	58.4	318	213.4	82	48.3	1,504	1,304	1.8	857.55
Vermont-----	325	99.1	477	189.3	309	235.7	144	83.4	1,323	1,268	3.4	893.67
Virginia-----	1,909	59.6	3,235	99.6	2,199	194.1	943	71.6	11,976	9,967	3.0	614.91
Washington-----	1,439	75.3	2,353	177.9	1,482	178.6	763	82.0	6,339	7,293	3.1	775.09
West Virginia-----	1,494	70.8	2,413	131.4	1,569	131.4	84.1	34.1	6,545	5,171	2.6	568.99
Wisconsin-----	3,394	97.2	4,613	132.2	2,969	131.4	1,203	61.3	15,848	14,177	2.4	894.21
Wyoming-----	191	54.8	223	77.6	140	203.0	94	110.2	893	830	2.1	836.19

<sup>1</sup>Number of first admissions per 100,000 of the estimated civilian population as of July 1.

<sup>2</sup>Number of admissions per 100,000 of the estimated civilian population as of July 1.

<sup>3</sup>Number of discharges per 1,000 average patients on the hospital books during the year. This average was obtained by computing the average number of patients on books at the beginning and end of the year.

<sup>4</sup>Number of deaths per 1,000 patients under treatment during the year. Patients under treatment was obtained by adding all admissions (excluding transfers) to the number of resident patients at the beginning of the year.

<sup>5</sup>Number of average daily resident patients per 1,000 of the estimated civilian population as of July 1.

<sup>6</sup>Based on average daily resident-patient population of hospitals reporting expenditures.

<sup>7</sup>Included in the statistics presented are the following data for the respective county systems in the United States and each State:

STATE	First admissions	All admissions (except transfers)	Discharges	Deaths in hospital	Patients on books at end of year	Average daily resident patient population	Per capita maintenance expenditures
TOTAL-----	3,679	4,706	2,272	2,392	24,688	22,949	\$910.79
California-----	342	387	200	319	1,077	1,075	1,445.84
Iowa-----	---	---	36	108	2,245	2,192	---
Maryland-----	59	76	9	3	401	87	937.26
New Jersey-----	1,459	1,908	909	823	7,398	8,277	1,051.46
Tennessee-----	233	375	302	223	842	827	667.62
Wisconsin-----	1,493	1,992	916	1,014	12,923	12,443	899.19

<sup>6</sup>Data for the Iowa County hospitals were not available.

SYMBOLS USED:

Data not available--three dashes ---.

SOURCES:

Data based on reports from 204 State and 113 county hospitals for mental disease for the 1952 Census of Mental Patients. Data for expenditures were available from 196 of the State hospitals and 46 of the county hospitals. However, the hospitals reporting expenditures represented 97.4 percent and 89.3 percent of the total average of the number daily resident patient population reported for the State and county hospitals, respectively. Estimated civilian population as of July 1, 1952, from Current Population Reports, Population Estimates Series P-25, Number 87, U. S. Department of Commerce, Bureau of the Census, Washington, D. C.

Over 622,000 persons were in the hospital or in some form of extramural care at the end of 1952 as compared to about 610,000 in 1951. This represents an increase of about two percent.

The average number of patients in daily residence during the year was 526,342, an increase of 1.9 percent over the corresponding number of 515,108 in 1951. Of these patients, 95.6 percent were in State hospitals and only 4.4 percent in county hospitals. However, in States with county mental hospital systems the patients resident in the county mental hospitals represent a significant portion of the mentally ill hospitalized in public hospitals. In terms of the rate per 1,000 estimated civilian population, 3.4 persons were hospitalized, on the average, for each 1,000 estimated persons in the civilian population on any given day; this rate varied among the 48 States and the District of Columbia from a low of 1.6 to a high of 8.8. The median rate was 3.1. Figure 1 shows the distribution of these rates by State. The Southern and Western States have low ratios as compared to the Northern and Eastern ones.

The average rate of first admissions to public mental hospitals was 74.3 per 100,000 estimated civilian population, an increase of 3.2 percent as compared to the 1951 rate. The median rate in 1952 was 67.4

with a range from a low of 32.1 to a high of 145.5. In 1951 the median rate was 64.9 with a range of 28.1 to 141.4.

The rate of discharge per 1,000 average patients on hospital books for the United States was 160.6, a 7.1 percent increase over the 1951 rate. The median rate in 1952 was 180.4 per 1,000 as compared to 167.7 in 1951. The range was somewhat broader in 1952 with a low of 54.9 and a high of 438.2 as compared to 81.6 and 342.8 in 1951.

The average death rate showed a slight increase, 65.3 per 1,000 patients under treatment during the year, as compared to 64.1 in 1951. The median death rate in 1952 was 61.6 with a range of 45.6 to 110.2. In 1951 the median rate was 62.3 with a range of 37.6 to 92.6.

Per capita maintenance expenditure for the United States was \$937.08 per year or \$2.57 per patient per day as compared to \$2.26 in 1951.

The median expenditure (excluding South Dakota for which no data were available) was \$851.90 with a range of \$429.53 to \$1,740.77. On a daily per capita basis the median is \$2.33 with a range of \$1.18 to \$4.77 as compared to a median of \$2.14 and a range of \$1.03 to \$4.36 in 1951.

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<sup>2</sup>This report does not include data for neuropsychiatric patients in Veterans Administration hospitals.

SUMMARY DATA AND RATES FOR PATIENTS AND PER CAPITA MAINTENANCE EXPENDITURES IN PUBLIC HOSPITALS FOR THE PROLONGED CARE OF THE MENTALLY ILL:  
UNITED STATES AND EACH STATE, 1953

STATE	FIRST ADMISSIONS		ALL ADMISSIONS (EXCEPT TRANSFERS)		DISCHARGES		DEATHS IN HOSPITAL		PATIENTS ON BOOKS AT END OF YEAR		AVERAGE DAILY RESIDENT-PATIENT POPULATION		PER CAPITA MAINTENANCE EXPENDITURES <sup>6</sup>	
	Number	Rate <sup>1</sup>	Number	Rate <sup>2</sup>	Number	Rate <sup>3</sup>	Number	Rate <sup>4</sup>			Number	Rate <sup>5</sup>		
United States-----	118,400	75.9	163,482	104.8	104,333	166.8	44,800	64.5	632,042		538,337	3.5	\$984.66	
Alabama-----	1,466	47.7	2,096	68.2	1,456	188.0	429	47.8	7,849		6,949	2.3	563.86	
Arizona-----	703	77.1	844	92.5	632	342.4	136	55.7	1,882		1,638	1.8	1,046.83	
Arkansas-----	1,669	88.4	2,366	125.3	1,806	288.7	408	57.9	7,796		4,796	2.5	936.20	
California <sup>7</sup> -----	12,374	105.1	17,077	145.1	11,754	263.2	3,069	59.9	45,693		35,001	3.0	1,086.93	
Colorado-----	509	36.9	713	51.7	560	92.2	449	75.2	6,114		5,335	3.9	999.76	
Connecticut-----	2,264	105.2	3,457	160.6	2,425	237.9	868	71.1	10,282		8,945	4.2	1,366.24	
Delaware-----	359	101.4	482	136.2	318	163.3	91	48.8	1,983		1,377	3.9	1,129.79	
District of Columbia-----	1,155	141.9	1,524	190.5	777	133.5	426	40.9	7,362		7,060	5.8	1,810.61	
Florida-----	1,122	44.5	1,442	44.3	682	84.4	108	47.4	8,579		7,580	3.1	701.64	
Georgia-----	2,172	73.4	3,419	117.5	1,886	146.5	822	60.7	13,237		10,858	3.1	707.82	
Idaho-----	559	99.1	732	159.2	564	508.5	146	67.8	1,513		1,227	2.1	1,027.89	
Illinois-----	9,378	104.8	13,449	150.2	9,005	217.6	3,770	74.1	43,684		37,834	4.2	998.53	
Indiana-----	1,610	39.2	2,291	55.7	1,227	112.0	744	60.3	11,100		10,138	2.5	779.38	
Iowa <sup>7</sup> -----	1,614	62.0	2,215	85.1	1,750	186.2	733	72.1	9,261		7,873	3.0	843.46	
Kansas-----	848	43.2	1,259	64.2	977	180.1	330	54.6	5,396		4,705	2.4	1,411.67	
Kentucky-----	1,519	52.6	2,336	80.9	1,580	190.5	599	62.7	8,364		7,384	2.6	573.54	
Louisiana-----	1,628	77.3	2,200	77.5	1,517	167.9	443	46.3	9,153		7,470	2.6	496.70	
Maine-----	528	58.5	774	85.8	520	162.0	235	64.6	3,219		2,885	3.2	877.41	
Maryland <sup>7</sup> -----	1,926	78.2	2,813	114.2	1,723	169.4	617	55.2	10,405		8,526	3.5	1,088.56	
Massachusetts-----	5,387	111.2	7,263	150.0	4,969	193.1	2,125	71.1	25,807		23,712	4.9	1,218.75	
Michigan-----	3,128	45.8	4,228	61.8	2,673	100.7	1,446	58.3	26,556		20,682	3.0	1,271.39	
Minnesota-----	3,221	105.6	4,410	144.6	2,909	221.8	1,220	78.0	13,229		11,568	3.8	1,036.41	
Mississippi-----	1,940	89.9	2,902	134.5	1,799	228.3	362	44.9	8,206		5,136	2.4	654.99	
Missouri-----	1,549	38.2	1,998	49.3	1,303	96.4	866	60.9	13,431		12,179	3.0	773.55	
Montana-----	606	99.5	1,070	175.7	1,501	540.7	175	59.8	2,228		1,918	3.1	879.06	
Nebraska-----	884	65.9	1,434	106.9	1,031	175.8	322	51.7	5,898		4,571	3.4	1,319.29	
Nevada-----	174	87.4	192	96.5	113	225.5	45	77.2	518		406	2.0	847.15	
New Hampshire-----	669	127.9	908	173.6	607	187.0	258	72.5	3,267		2,660	5.1	1,163.37	
New Jersey <sup>7</sup> -----	5,089	100.5	7,021	138.6	4,067	165.6	2,344	82.6	24,811		21,305	4.2	1,144.91	
New Mexico-----	343	46.9	361	49.4	229	142.0	77	52.2	1,614		1,124	1.5	1,105.42	
New York-----	15,914	104.9	21,754	143.4	10,751	106.3	8,021	72.2	102,424		90,562	6.0	1,158.57	
North Carolina-----	2,446	59.7	2,937	71.7	2,358	202.9	467	37.5	11,666		9,644	2.4	948.91	
North Dakota-----	401	64.7	506	81.6	359	149.8	134	51.8	2,402		2,085	3.5	848.08	
Ohio-----	4,712	56.4	6,506	77.9	4,418	141.5	1,013	59.2	31,302		28,026	3.2	639.42	
Oklahoma-----	1,472	66.4	2,170	97.8	1,599	175.2	501	60.1	8,603		7,402	3.6	955.48	
Oregon-----	1,791	112.1	2,469	154.6	1,772	300.6	522	74.7	5,363		4,596	2.9	955.48	
Pennsylvania-----	5,957	56.1	7,476	70.4	3,096	68.5	2,739	60.4	46,048		38,348	3.6	894.21	
Rhode Island-----	973	124.7	1,464	187.7	1,190	285.7	358	74.2	4,111		3,398	4.4	765.51	
South Carolina-----	1,658	77.8	2,179	102.2	1,632	242.2	408	53.1	6,807		5,545	2.6	693.10	



South Dakota	527	81.1	579	89.1	371	211.9	98	43.1	1,806	1,751	2.7	681.49
Tennessee	1,939	58.6	2,657	80.3	1,674	211.9	688	66.4	8,043	8,183	2.5	407.61
Texas	3,802	47.0	5,007	62.0	3,284	165.2	1,135	53.2	20,151	16,204	2.0	705.37
Utah	310	42.4	403	55.1	315	209.3	87	50.8	1,505	1,327	1.8	935.47
Vermont	357	95.2	517	137.9	346	260.5	126	70.7	1,332	1,281	3.4	913.50
Virginia	2,154	64.4	3,476	103.9	2,185	179.6	874	64.3	12,353	10,280	3.1	715.02
Washington	2,068	86.1	2,652	110.5	1,397	165.3	756	76.5	8,647	7,353	3.1	801.25
West Virginia	1,636	84.5	2,488	128.4	1,834	279.7	392	51.0	6,687	5,272	2.7	602.81
Wisconsin	3,289	93.6	4,471	127.2	2,802	175.4	1,316	68.9	16,045	14,770	4.2	1,022.15
Wyoming	181	61.4	275	93.2	190	269.5	62	68.1	713	651	2.2	832.34

1 Number of first admissions per 100,000 of the estimated civilian population as of July 1, 1953.

2 Number of admissions per 100,000 of the estimated civilian population as of July 1, 1953.

3 Number of discharges per 1,000 average patients on the hospital books during the year. This average was obtained by computing the average number of patients on books at the beginning and end of year.

4 Number of deaths per 1,000 patients under treatment during the year. Patients under treatment was obtained by adding all admissions (excluding transfers) to the number of resident patients at the beginning of the year.

5 Number of average daily resident patients per 1,000 of the estimated civilian population as of July 1, 1953.

6 Based on average daily resident-patient population of hospitals reporting expenditures.

7 Included in the statistics presented are the following data for the respective county systems in the United States and each State:

State	First admissions	All admissions (except transfers)	Discharges	Deaths in hospital	Patients on books at end of year	Average daily resident-patient population	Per capita maintenance expenditures <sup>6</sup>
TOTAL	3,637	4,516	2,327	2,521	24,571	23,448	\$858.26
California	197	236	139	185	636	1,045	1,594.56
Iowa	58	62	28	182	2,289	2,267	970.09
Maryland	1,550	1,962	13	17	92	87	1,114.93
New Jersey	343	425	970	867	7,487	6,386	1,448.86
Tennessee	1,489	1,831	257	146	970	1,150	868.41
Wisconsin			920	1,124	13,097	12,513	

#### SYMBOLS USED:

Quantity is zero - one dash (-)

Data not available - three dashes (- - -)

#### SOURCES:

Data based on reports from the 205 State and the 113 county hospitals for mental disease for the 1953 Census of Mental Patients. Data on expenditures were available from 201 of the State hospitals and 47 of the county hospitals. However, the hospitals reporting expenditures represented 99.8 percent and 89.1 percent of the total average daily resident-patient population reported for the State and county hospitals, respectively. Estimated civilian population as of July 1, 1953, from Current Population Reports, Population Estimates Series P-25, Number 97, U. S. Department of Commerce, Bureau of the Census, Washington, D. C.

Over 632,000 persons were resident in the 318 hospitals or in some form of extramural care at the end of 1953 as compared to about 622,000 in 1952, an increase of about 1.5 percent.

The average number of patients in daily residence during the year was 538,337, an increase of 2.3 percent over the corresponding number of 526,342 in 1952. Of these patients, 95.6 percent were in State hospitals and only 4.4 percent in county hospitals. However, in the six States with county mental hospital systems the patients resident in the county mental hospitals represent a significant portion of the mentally ill hospitalized in public hospitals. There were 3.5 persons hospitalized, on the average, for each 1,000 estimated persons in the civilian population on any given day; this rate varied among the 48 States and the District of Columbia from a low of 1.5 to a high of 8.8. The median rate was 3.0. Figure 1 shows the distribution of these rates by State. The Southern and Western States have low rates as compared to the Northern and Eastern ones.

The average rate of first admissions to public mental hospitals was 75.9 per 100,000 estimated civilian population, an increase of

2.2 percent over the 1952 rate. The median rate in 1953 was 77.1, with a range from a low of 34.5 to a high of 141.9. In 1952 the median rate was 67.4 with a range of 32.1 to 145.5.

The rate of discharge per 1,000 average patients on hospital books for the United States was 166.8, a 3.9 percent increase over the 1952 rate. The median rate in 1953 was 186.2 per 1,000 as compared with 180.4 in 1952. The range was somewhat broader in 1953 with a low of 68.5 and a high of 540.7, as compared with 54.9 and 438.2 in 1952.

The average death rate, 64.5 per 1,000 patients under treatment, showed a slight decrease compared to the 1952 rate of 65.3. The median death rate in 1953 was 60.4 with a range of 37.5 to 82.6. In 1952 the median rate was 61.6 with a range of 45.6 to 110.2.

Per capita maintenance expenditure for the United States was \$984.66 per year or \$2.70 per patient per day as compared to \$2.57 in 1952. The median expenditure was \$894.21 with a range of \$407.61 to \$1810.61. On a daily per capita basis the median was \$2.45 with a range of \$1.12 to \$4.96 as compared to a median of \$2.33 and a range of \$1.18 to \$4.77 in 1952.

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# MENTAL HEALTH STATISTICS

## Current Reports

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

January 1956

Bethesda 14, Md.

Series MHB-H-1

### PATIENTS IN PUBLIC HOSPITALS FOR THE PROLONGED CARE OF THE MENTALLY ILL, 1954

This is the fifth in a series of reports presenting summarized information<sup>1</sup> on the State and county hospitals for the prolonged care of the mentally ill in the United States<sup>2</sup>. Prior reports,

Series IMH-B53, Nos. 1 and 2, and Series IMH-B54, Nos. 1 and 2, dealt with data for the years 1950, 1951, 1952 and 1953, respectively.

### AVERAGE DAILY RESIDENT PATIENTS IN PUBLIC HOSPITALS FOR MENTAL DISEASE PER 1,000 CIVILIAN POPULATION: 1954

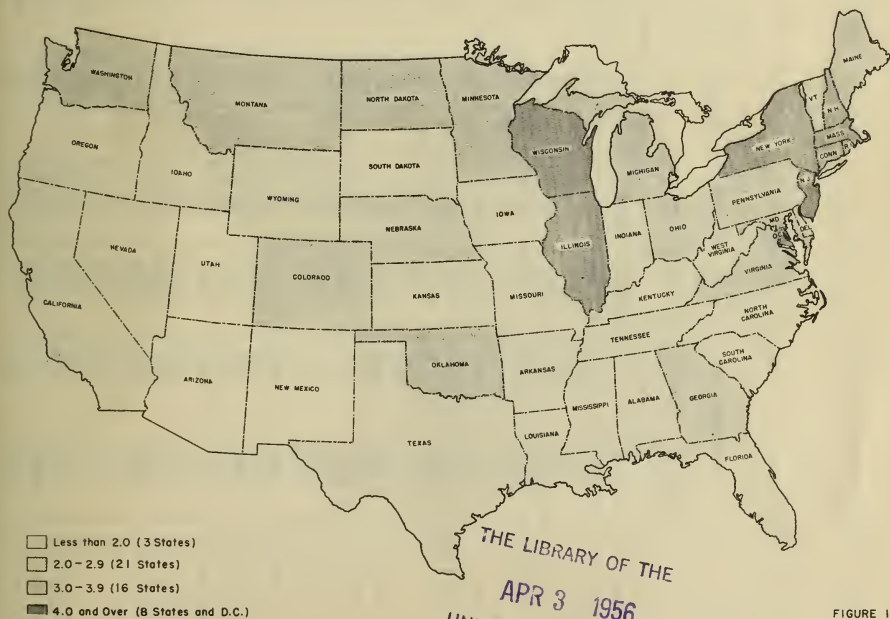


FIGURE 1

<sup>1</sup>Data are based on preliminary tabulations made for the hospitals reporting in the 1954 Census of Patients in Mental Institutions. Final editing and tabulation of these data may subject them to revision when prepared

for final publication.  
<sup>2</sup>This report does not include data for neuropsychiatric patients in Veterans Administration hospitals.

SUMMARY DATA AND RATES FOR PATIENTS AND PER CAPITA MAINTENANCE EXPENDITURES IN PUBLIC HOSPITALS FOR THE  
PROLONGED CARE OF THE MENTALLY ILL: UNITED STATES AND EACH STATE, 1954

STATE	First Admissions		All Admissions (Except Transfers)		Discharges	Deaths in Hospital	Patients on Books at End of Year	Average Daily Resident Patient Population		Per Capita Maintenance Expenditures <sup>4</sup>
	Number	Rate <sup>1</sup>	Number	Rate <sup>2</sup>				Number	Rate <sup>3</sup>	
United States-----	118,609	74.6	167,185	105.1	111,698	42,560	642,419	547,393	3.4	\$1,036.21
Alabama-----	1,461	47.1	2,098	67.7	1,487	453	7,996	7,076	2.3	675.28
Arizona-----	609	62.5	704	72.3	497	123	1,703	1,703	1.7	1,095.93
Arkansas-----	1,571	83.1	2,301	121.7	1,724	330	6,024	4,998	2.6	926.00
California <sup>5</sup> -----	12,197	99.9	16,536	135.4	13,595	2,685	45,645	35,635	2.9	1,143.77
Colorado-----	459	32.6	761	54.0	573	515	6,228	5,489	3.9	1,148.52
Connecticut-----	2,320	105.0	3,641	164.8	2,684	817	10,405	9,063	4.1	1,443.47
Delaware-----	549	96.4	487	134.5	521	115	2,036	1,409	3.9	1,229.31
District of Columbia-----	975	118.9	1,219	148.7	921	416	7,430	7,117	8.7	1,845.32
Florida-----	1,192	34.7	1,564	45.5	770	393	8,646	7,567	2.2	853.61
Georgia-----	2,951	82.9	3,639	102.2	2,192	900	13,784	11,267	3.2	728.60
Idaho-----	688	112.6	1,048	171.5	843	119	1,604	1,252	2.0	1,051.10
Illinois-----	8,589	94.3	13,199	144.9	9,325	3,441	42,053 <sup>6</sup>	38,237	4.2	944.30
Indiana-----	1,715	40.8	2,407	57.3	1,294	699	11,562	10,469	2.5	1,025.67
Iowa <sup>5</sup> -----	1,724	65.4	2,421	91.8	1,828	702	8,973	7,728	2.9	901.92
Kansas-----	968	49.1	1,489	75.5	1,000	241	5,630	4,551	2.3	1,529.35
Kentucky-----	1,581	54.0	2,451	83.7	1,621	599	8,547	7,515	2.6	605.13
Louisiana-----	2,075	71.5	2,752	94.9	1,554	439	10,129	8,145	2.8	584.68
Maine-----	384	63.8	812	88.6	497	246	3,288	2,932	3.2	1,032.09
Maryland <sup>5</sup> -----	2,291	90.8	3,212	127.4	1,893	600	11,060	8,999	3.6	1,118.46
Massachusetts-----	5,231	106.6	7,509	153.1	5,196	2,251	26,785	23,417	4.8	1,220.45
Michigan-----	2,864	40.9	4,329	61.8	2,366	1,378	26,877	20,930	3.0	1,419.23
Minnesota-----	2,645	85.4	4,265	137.7	2,911	1,101	13,414	11,362	3.7	1,081.18
Mississippi-----	1,996	91.6	2,934	134.6	2,258	279	7,100	5,215	2.4	658.19
Missouri-----	1,350	32.8	1,879	45.7	1,255	670	13,391	12,115	2.9	776.88
Montana-----	618	99.0	778	124.7	584	198	2,299	1,942	3.1	927.34
Nebraska-----	642	47.3	1,181	87.0	1,076	303	5,708	4,651	3.4	1,106.70
Nevada-----	202	96.7	227	108.6	120	32	537	413	2.0	973.96
New Hampshire-----	669	126.7	895	169.5	628	278	3,256	2,663	5.0	1,270.43
New Jersey <sup>5</sup> -----	4,979	96.2	7,031	135.9	4,271	2,207	23,814	20,473	4.0	1,159.99
New Mexico-----	371	49.3	412	54.8	233	93	1,692	1,105	1.5	1,182.30



New York	16,062	104.5	22,030	143.3	10,839	7,956	104,854	93,304	6.1	1,184.42
North Carolina	2,557	61.4	3,156	75.8	2,475	468	11,864	10,110	2.4	1,003.07
North Dakota	542	85.4	736	115.9	551	136	2,447	2,087	3.3	854.46
Ohio	6,861	80.4	9,726	114.0	7,131	1,964	33,349	27,767	3.3	956.12
Oklahoma	1,147	51.4	1,811	81.1	1,662	491	8,717	7,834	3.5	759.55
Oregon	1,806	110.5	2,530	154.8	1,706	439	6,198	4,625	2.8	1,045.15
Pennsylvania	5,607	52.1	7,534	70.1	3,103	2,587	47,902	39,142	3.6	980.32
Rhode Island	850	107.6	1,416	179.2	1,032	386	4,095	3,459	4.4	798.23
South Carolina	1,642	75.6	2,216	102.1	1,548	385	7,090	5,785	2.7	749.49
South Dakota	430	65.3	628	95.3	643	152	1,640	1,696	2.6	897.30
Tennessee	1,991	59.5	2,826	84.5	1,962	557	8,373	8,140	2.4	473.03
Texas	3,695	44.8	5,194	63.0	4,014	1,002	20,256	16,328	2.0	799.71
Utah	308	40.9	421	55.9	258	106	1,562	1,342	1.8	1,031.54
Vermont	350	91.4	517	135.0	359	105	1,385	1,273	3.3	1,038.93
Virginia	2,174	63.6	3,548	103.8	2,254	786	12,824	10,721	3.1	780.65
Washington	1,945	79.1	2,112	85.9	1,688	742	8,643	7,483	3.0	901.17
West Virginia	1,542	79.2	2,176	111.8	1,999	350	6,503	5,377	2.8	688.33
Wisconsin	3,051	85.4	4,149	116.1	2,786	1,249	16,111	14,834	4.2	1,092.55
Wyoming	183	60.6	278	92.1	171	78	731	648	2.1	881.02

<sup>1</sup>Number of first admissions per 100,000 of the estimated civilian population as of July 1, 1954.

<sup>2</sup>Number of admissions per 100,000 of the estimated civilian population as of July 1, 1954.

<sup>3</sup>Number of average daily resident patients per 1,000 of the estimated civilian population as of July 1, 1954.

<sup>4</sup>Based on average daily resident-patient population of hospitals reporting expenditures.

<sup>5</sup>Includes the county hospital system within the State.

SOURCES: Data based on reports from 341 of the 342 State and county hospitals for mental disease for the 1954 Census of Mental Patients. Data on expenditures were available from 261 of the 342 State and county hospitals. However, the hospitals reporting expenditures represented 99.6 percent of the total average daily resident-patient population. Estimated civilian population as of July 1, 1954, from Current Population Reports, Population Estimates Series P-25, No. 108, U. S. Department of Commerce, Bureau of Census, Washington, D. C.

Over 642,000 persons were either resident in the 341 hospitals or were in some form of extra-mural care at the end of 1954 as compared to about 632,000 in 1953, an increase of about 1.6 percent.

The average number of patients in daily residence during the year was 547,393, an increase of 1.7 percent over the corresponding number of 538,337 in 1953. Of these patients, 95.8 percent were in State hospitals and only 4.2 percent in county hospitals. However, in the six States with county mental hospital systems, the patients resident in the county mental hospitals represent a significant portion of the mentally ill hospitalized in public hospitals. There were 3.4 persons hospitalized, on the average, for each 1,000 estimated persons in the civilian population on any given day; this rate varied among the 48 States and the District of Columbia from a low of 1.5 to a

high of 8.7. The median rate was 3.0. Figure 1 shows the distribution of these rates by State. The Southern and Western States have low rates as compared to the Northern and Eastern ones.

The average rate of first admission to public mental hospitals was 74.6 per 100,000 estimated civilian population, a decrease of 1.7 percent below the 1953 rate. The median rate in 1954 was 79.1, with a range from a low of 32.6 to a high of 126.7. In 1953 the median rate was 77.1, with a range of 34.5 to 141.9.

Per capita maintenance expenditure for the United States was \$1,036.21 per year or \$2.84 per patient per day as compared to \$2.70 in 1953. The median expenditure was \$980.32 with a range of \$473.03 to \$1,845.32. On a daily per capita basis the median was \$2.69 with a range of \$1.30 to \$5.06, as compared to a median of \$2.45 and a range of \$1.12 to \$4.96 in 1953.

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## Current Reports

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

December 1956

Bethesda 14, Md.

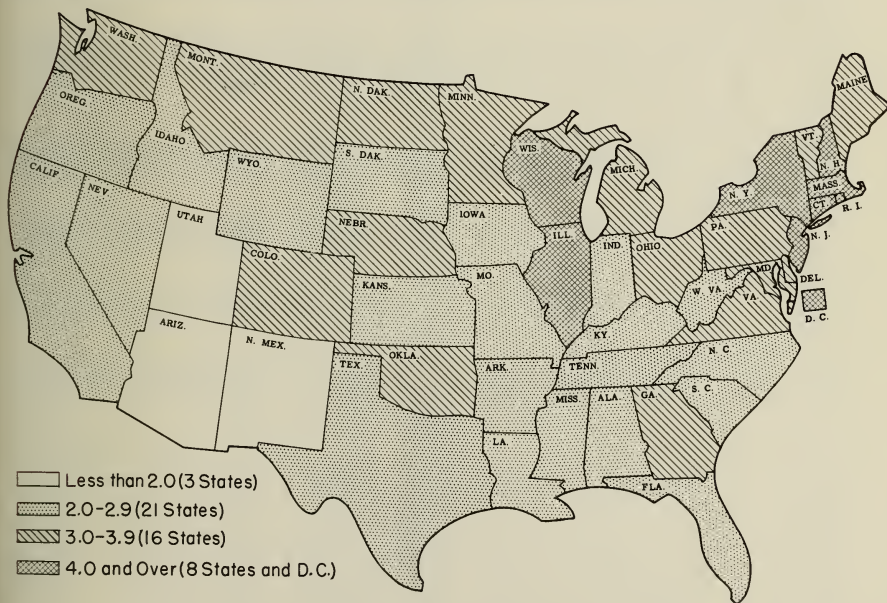
Series MHB-H-2

### PATIENTS IN PUBLIC HOSPITALS FOR THE PROLONGED CARE OF THE MENTALLY ILL, 1955

This is the sixth<sup>1</sup> in a series of reports presenting summarized information<sup>2</sup> on the State and county hospitals for the pro-

longed care of the mentally ill in the United States.<sup>3</sup>

AVERAGE DAILY RESIDENT PATIENTS IN PUBLIC HOSPITALS FOR MENTAL DISEASE PER 1,000 CIVILIAN POPULATION:1955



<sup>1</sup> Prior reports, Series IMH-B53, Nos. 1 and 2, Series IMH-B54, Nos. 1 and 2, and Series MHB-H-1, dealt with data for the years 1950, 1951, 1952, 1953 and 1954, respectively.

<sup>2</sup> Data are based on preliminary tabulations made for the hospitals reporting in the 1955 Census of Patients in Mental Institutions. Final

editing and tabulation of these data may subject them to revision when prepared for final publication.

<sup>3</sup>This report does not include data for neuropsychiatric patients in Veterans Administration hospitals.

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SUMMARY DATA AND RATES FOR PATIENTS AND PER PATIENT MAINTENANCE EXPENDITURES IN PUBLIC HOSPITALS FOR THE PROLONGED CARE OF THE MENTALLY ILL: UNITED STATES AND EACH STATE, 1955

STATE	First Admissions		All Admissions (Except Transfers)		Discharges	Deaths in Hospital	Patients on Books at End of Year	Average Daily Resident Patient Population		Per Patient Maintenance Expenditures <sup>4</sup>
	Number	Rate <sup>1</sup>	Number	Rate <sup>2</sup>				Number	Rate <sup>3</sup>	
United States-----	119,411	73.6	173,864	107.1	115,930	44,280	652,412	554,592	3.4	\$1,107.79
Alabama-----	1,502	50.0	2,172	72.5	1,656	469	8,051	7,136	2.4	717.55
Arizona-----	1,601	71.2	2,080	96.0	1,580	155	1,077	1,011	2.4	1,228.50
Arkansas-----	1,600	90.4	2,282	129.2	1,900	332	2,077	2,077	1.8	826.37
California <sup>4</sup> -----	11,907	92.8	17,989	137.0	13,738	2,862	46,225	3,428	2.9	1,228.16
Colorado-----	684	45.4	893	59.2	561	517	6,444	3,649	3.7	1,184.42
Connecticut-----	2,422	108.5	3,811	170.7	3,041	938	10,207	8,958	4.0	1,629.18
Delaware-----	352	92.6	471	123.9	399	96	2,012	1,400	3.7	1,293.51
District of Columbia-----	1,021	122.9	1,349	162.3	748	502	7,329	7,216	8.7	1,889.49
Florida-----	1,374	40.8	1,787	53.1	885	511	9,035	7,692	2.3	859.27
Georgia-----	2,878	81.3	3,562	100.6	2,480	858	14,008	11,582	3.3	733.44
Idaho-----	666	109.9	1,043	172.1	964	134	1,544	1,236	2.0	1,197.25
Illinois-----	8,380	90.1	13,094	140.8	9,729	3,442	41,926	38,494	4.1	992.41
Indiana-----	2,350	54.3	3,324	76.9	1,594	775	12,373	10,803	2.5	1,125.25
Iowa-----	1,238	46.0	2,490	92.6	2,229	475	6,475	5,330	2.0	1,121.06
Kansas-----	1,040	51.5	1,514	74.9	1,046	288	5,762	4,462	2.2	1,718.62
Kentucky-----	1,396	47.4	2,398	81.3	1,719	593	8,615	7,689	2.6	653.78
Louisiana-----	2,000	68.9	2,766	95.3	1,876	422	10,537	8,184	2.8	669.64
Maine-----	533	59.9	787	88.4	502	258	3,324	2,983	3.4	1,067.50
Marland <sup>5</sup> -----	2,309	89.0	3,375	130.2	2,242	727	11,386	9,192	3.5	1,171.59
Massachusetts-----	5,940	119.5	7,668	154.2	5,503	2,390	26,437	23,065	4.6	1,315.91
Michigan-----	3,098	42.9	4,628	64.1	2,523	1,451	27,486	21,387	3.0	1,476.91
Minnesota-----	2,540	80.2	4,279	138.2	3,018	1,002	13,717	11,524	3.6	1,093.24
Mississippi-----	1,905	91.4	3,465	166.2	2,406	346	7,802	5,297	2.5	705.91
Missouri-----	1,346	32.9	1,821	44.5	1,275	691	13,260	12,017	2.9	854.03
Montana-----	647	103.0	861	137.1	524	176	2,418	1,956	3.1	935.57
Nebraska-----	911	66.5	1,749	127.8	637	411	6,429	4,837	3.5	1,120.05
Nevada-----	209	95.8	237	109.7	192	47	532	429	2.0	1,106.80
New Hampshire-----	666	120.4	940	170.0	623	274	2,963	2,021	4.3	1,329.41
New Jersey-----	5,089	84.8	7,157	133.3	4,276	2,502	25,760	22,280	4.1	1,353.93
New Mexico-----	407	52.9	475	62.3	292	102	1,774	1,049	1.4	1,534.41
New York-----	15,955	99.4	21,895	136.4	9,834	8,153	108,090	95,734	6.0	1,243.76
North Carolina-----	2,309	55.1	3,277	77.3	2,514	445	12,125	9,913	2.4	1,046.53
North Dakota-----	513	80.0	775	120.9	624	128	2,478	2,023	3.2	960.01
Ohio-----	7,191	80.4	10,178	113.8	7,682	2,044	33,915	28,367	3.2	1,038.84
Oklahoma-----	1,238	58.0	2,099	98.3	1,273	320	9,017	7,919	3.7	830.94



Oregon-----	1,943	116.8	2,759	165.8	1,989	531	6,191	4,847	2.9	1,060.72
Pennsylvania-----	5,499	49.4	7,708	69.2	3,639	2,813	49,197	40,447	3.6	1,111.32
Rhode Island-----	898	110.3	1,386	170.3	909	400	4,155	3,422	4.2	924.66
South Carolina-----	1,727	77.6	2,283	102.6	1,594	382	7,397	5,966	2.7	798.61
South Dakota-----	496	73.8	727	112.6	599	119	1,679	1,603	2.4	1,002.89
Tennessee <sup>1</sup> -----	1,370	40.3	2,398	70.6	1,798	439	7,809	7,623	2.2	561.95
Texas-----	3,803	45.5	5,268	63.1	4,222	975	20,239	16,466	2.0	850.30
Utah-----	359	46.3	471	60.7	281	148	1,604	1,349	1.7	1,171.90
Vermont-----	348	92.3	513	136.1	374	125	1,401	1,290	3.4	1,075.27
Virginia-----	2,294	67.1	3,819	111.6	2,576	813	13,422	11,063	3.2	836.76
Washington-----	1,492	59.8	2,379	95.3	1,684	744	8,515	7,496	3.0	1,044.21
West Virginia-----	1,740	87.0	2,584	119.1	1,832	426	6,606	5,462	2.7	662.16
Wisconsin <sup>2</sup> -----	2,981	86.8	4,422	120.6	3,021	1,423	16,263	15,056	4.1	1,148.75
Wyoming-----	167	56.6	226	86.8	197	65	715	651	2.2	1,244.91

<sup>1</sup> Number of first admissions per 100,000 of the estimated civilian population as of July 1, 1955.

<sup>2</sup> Number of admissions per 100,000 of the estimated civilian population as of July 1, 1955.

<sup>3</sup> Number of average daily resident patients per 1,000 of the estimated civilian population as of July 1, 1955.

<sup>4</sup> Based on average daily resident patient population of hospitals reporting expenditures.

<sup>5</sup> Includes the county hospital system within the State.

SOURCES: Data based on reports from 265 of the 266 State and county hospitals for mental disease for the 1955 Census of Mental Patients. Data on expenditures were available from 263 of the 266 State and county hospitals. However, the hospitals reporting expenditures represented 99.7 percent of the total average daily resident-patient population. Estimated civilian population as of July 1, 1955, from Current Population Reports, Population Estimates Series P-25, No. 129, U. S. Department of Commerce, Bureau of Census, Washington, D. C.

Over 652,000 persons were either resident in the 265 hospitals or were in some form of extramural care at the end of 1955 as compared to about 642,000 in 1954, an increase of about 1.6 percent.

The average number of patients in daily residence during the year was 554,592, an increase of 1.3 percent over the corresponding number of 547,393 in 1954. Of these patients, 96.4 percent were in State hospitals and only 3.6 percent in county hospitals. However, in the five States with county mental hospital systems, the patients resident in the county mental hospitals represent a significant portion of the mentally ill hospitalized in public hospitals.

There were 3.4 persons hospitalized, on the average, for each 1,000 estimated persons in the civilian population on any given day; this rate varied among the 48 States and the District of Columbia from a low of 1.4 to a high of 8.7. The median rate was

3.0. Figure 1 shows the distribution of these rates by State. The Southern and Western States have low rates as compared to the Northern and Eastern ones.

The average rate of first admissions to public mental hospitals was 73.6 per 100,000 estimated civilian population, a decrease of 1.4 percent below the 1954 rate. The median rate in 1955 was 77.6, with a range from a low of 32.9 to a high of 122.9. In 1954 the median rate was 79.1, with a range of 32.6 to 126.7.

Per patient maintenance expenditure for the United States was \$1,107.79 per year or \$3.04 per patient per day as compared to \$2.84 in 1954. The median expenditure was \$1,075.27 with a range of \$561.95 to \$1,889.49. On a daily per patient basis the median was \$2.95 with a range of \$1.54 to \$5.18, as compared to a median of \$2.69 and a range of \$1.30 to \$5.06 in 1954.

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# MENTAL HEALTH STATISTICS

## Current Reports

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

December, 1957

Bethesda 14, Maryland

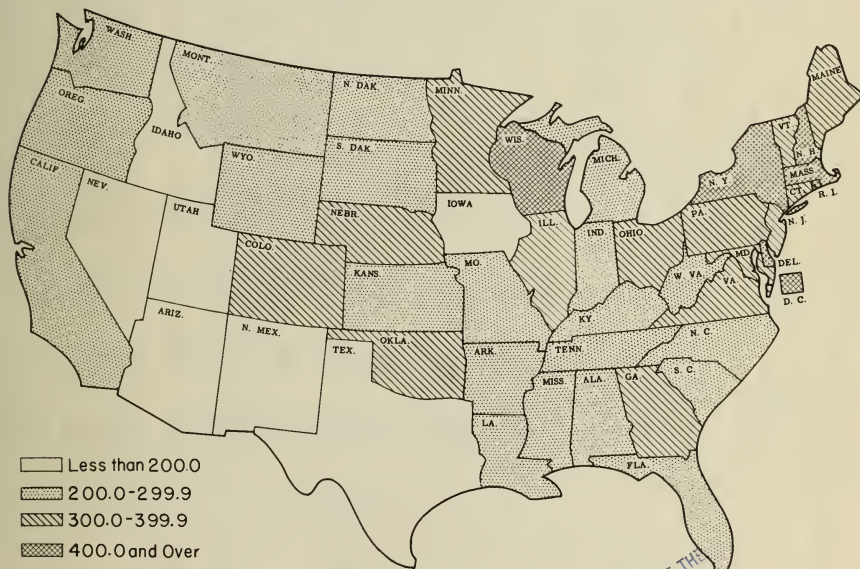
Series MHB-H-3

### PATIENTS IN PUBLIC HOSPITALS FOR THE CARE OF THE MENTALLY ILL 1956 and 1957

This is the first in a new series of reports which will replace the publication "Patients in Public Hospitals for the Prolonged Care of the Mentally Ill" previously published in the

Current Reports Series<sup>1</sup> and "Mental Patient Data for Fiscal Year" which appeared in Public Health Reports<sup>2</sup>.

### AVERAGE DAILY RESIDENT PATIENTS IN PUBLIC HOSPITALS FOR MENTAL DISEASE PER 100,000 CIVILIAN POPULATION:1957



<sup>1</sup> The most recent in this series was "Patients in Public Hospitals for the Prolonged Care of the Mentally Ill, 1955" Series MHB-H-2, December 1956.

<sup>2</sup> The most recent in this series was "Mental Patient Data for Fiscal Year 1956", Public Health Reports, Vol. 72, No. 1, January 1957.

TABLE 1

MOVEMENT AND ADMINISTRATIVE DATA FOR PUBLIC MENTAL HOSPITALS: UNITED STATES AND EACH STATE FISCAL YEAR 1956

All Admissions Excluding Transfers	First Admis- sions	Dis- charges	Deaths in Hospital	Resident Patients at end of Year		Average Daily Resident Popu- lation		Total Full-time Employees at End of Year	Maintenance Expenditures	
				Number	Rate <sup>1</sup>	Number	Rate <sup>1</sup>		Total	Per Patient <sup>2</sup>
United States-----	185,477	125,539	60,058	48,236	335.7	555,103	335.7	153,715	\$663,280,934.00	\$1,194.88
Prolonged Care <sup>3</sup> -----	181,477	122,585	58,892	48,133	332.9	554,157	332.9	151,769	656,230,633.00	1,184.20
Alabama-----	2,294	74.1	713	438	235.1	7,240	233.9	1,366	5,404,035.00	746.41
Arizona-----	830	78.1	82	640	151	1,639	154.2	526	2,202,551.00	1,319.68
Arkansas-----	2,141	123.1	741	1,713	285.1	4,957	285.0	1,368	4,703,446.00	948.85
California-----	18,276	139.1	5,900	2,802	37,365	36,985	281.5	9,591	50,397,326.00	1,362.64
Prolonged Care <sup>3</sup> -----	18,023	137.2	5,778	2,799	37,273	36,989	281.0	9,783	49,604,442.00	1,343.97
Colorado-----	1,709	108.4	360	1,229	562.8	5,628	361.2	1,879	7,576,223.00	1,330.10
Prolonged Care <sup>3</sup> -----	1,618	88.8	367	1,251	535.8	5,358	356.8	1,735	6,899,418.00	1,226.35
Connecticut-----	4,209	136.1	1,267	3,042	417.2	9,128	395.6	3,422	12,521,953.00	1,434.18
Delaware-----	968	236.1	321	642	409.3	1,696	411.7	450	2,523,429.00	1,734.99
Prolonged Care <sup>3</sup> -----	920	226.8	349	631	333.2	1,386	330.0	442	1,843,445.00	1,330.05
District of Columbia-----	1,327	164.0	418	882	708.6	875.9	7,120	880.1	14,327,083.00	2,012.23
Florida-----	1,879	49.5	399	1,147	80.6	8,035	211.8	2,285	7,145,203.00	889.26
Georgia-----	3,383	93.1	702	2,399	11,844	326.0	11,738	323.1	8,971,759.00	764.33
Idaho-----	1,082	174.2	665	417	1,179	189.9	1,182	190.3	1,249,555	1,249.55
Illinois-----	14,447	153.3	6,106	10,398	37,323	396.0	37,633	395.3	40,601,783.00	1,078.89
Indiana-----	3,784	85.4	1,174	2,821	10,908	246.2	11,021	248.8	15,453,888.00	1,402.22
Prolonged Care <sup>3</sup> -----	3,485	78.7	1,079	2,486	10,820	244.2	10,919	246.5	13,941,429.00	1,276.80
Iowa-----	2,986	108.5	1,382	2,509	5,088	184.9	5,151	187.2	6,179,622.00	1,199.69
Prolonged Care <sup>3</sup> -----	2,688	97.7	1,339	2,236	5,041	183.2	5,108	185.6	5,813,332.00	1,138.08
Kansas-----	1,711	85.0	516	1,438	4,394	213.2	4,427	214.8	8,035,908.00	1,815.20
Kentucky-----	2,728	92.0	1,255	2,144	7,335	247.2	7,490	252.5	5,651,448.00	755.87
Louisiana-----	2,894	97.5	1,148	2,398	8,264	278.5	8,263	278.3	5,934,263.00	1,145.75
Maine-----	898	98.0	277	585	2,981	325.4	3,004	327.9	3,424,602.00	1,710.01
Maryland-----	3,641	132.3	1,192	2,449	9,329	338.9	9,617	349.3	11,549,201.00	1,200.92
Massachusetts-----	7,853	164.8	1,809	4,642	22,202	465.8	22,785	478.1	32,110,189.00	1,409.27
Prolonged Care <sup>3</sup> -----	7,049	147.9	1,585	5,676	22,105	463.8	22,656	475.4	31,142,388.00	1,374.58
Michigan-----	5,032	66.5	1,672	2,915	12,149	283.8	12,616	285.7	34,313,765.00	1,587.42
Prolonged Care <sup>3</sup> -----	4,956	65.5	1,669	2,874	11,921	283.4	12,583	285.3	33,849,300.00	1,568.33
Minnesota-----	4,647	142.8	2,118	3,518	11,356	348.9	11,430	351.2	12,573,693.00	1,110.06
Mississippi-----	2,819	132.0	1,071	2,452	5,224	284.7	5,228	284.9	4,487,168.00	667.02
Missouri-----	1,813	43.5	467	1,182	11,753	282.0	11,912	285.9	12,015,213.00	1,008.66
Montana-----	1,416	122.2	534	1,060	287.0	1,905	284.0	534	2,574,411.00	1,422.53
Nebraska-----	1,730	122.3	628	1,347	4,750	336.6	4,753	336.8	5,987,975.00	1,283.03
Prolonged Care <sup>3</sup> -----	1,484	105.0	549	1,140	4,690	331.7	4,667	330.1	5,987,975.00	1,283.03
Nevada-----	231	93.1	35	181	30	439	446	179.8	536,834.00	1,203.62
New Hampshire-----	928	166.3	247	674	313	2,600	2,667	866	3,673,647.00	1,377.45
New Jersey-----	7,759	141.9	2,240	5,286	22,022	402.7	21,909	400.7	31,344,734.00	1,430.68



See page

New Mexico-----	550	69.9	380	170	467	76	912	115.9	971	123.4	407	1,485,106.00	1,529.46
New York-----	22,357	141.8	16,436	5,921	11,598	8,437	96,266	610.6	96,767	613.8	25,709	126,076,129.00	1,302.88
Prolonged Care <sup>3</sup> -----	21,886	138.8	16,108	5,778	11,116	8,436	96,212	610.2	96,711	613.4	25,619	125,685,365.00	1,299.60
North Carolina-----	3,551	82.1	2,341	1,210	2,971	518	9,794	226.4	9,874	228.2	2,851	10,570,091.00	1,070.50
North Dakota-----	906	141.1	607	299	686	159	1,886	293.8	1,923	299.5	518	2,010,901.00	1,045.71
Ohio-----	10,848	119.8	7,478	3,370	8,408	2,302	28,057	317.0	28,344	313.1	7,834	33,459,122.00	1,180.47
Oklahoma-----	2,259	102.1	1,371	888	1,541	577	7,835	354.0	7,897	356.8	2,132	7,110,393.00	900.39
Oregon-----	3,075	178.0	2,102	973	2,215	541	4,980	288.2	4,956	286.8	1,451	5,446,054.00	1,098.88
Pennsylvania-----	7,234	66.3	5,118	2,116	3,923	3,308	39,347	366.0	40,337	369.7	11,443	45,735,668.00	1,133.28
Rhode Island-----	1,491	182.7	952	539	968	451	3,402	416.9	3,413	418.3	853	3,285,689.00	962.70
South Carolina-----	2,343	103.0	1,782	561	1,736	455	6,224	273.6	6,113	268.7	1,371	5,108,768.00	835.72
South Dakota-----	750	109.3	508	242	571	169	1,613	235.1	1,602	233.5	451	1,702,187.00	1,062.54
Tennessee-----	3,387	99.6	2,179	1,208	2,833	660	8,169	240.3	8,294	243.9	1,293	5,435,491.00	655.35
Texas-----	3,075	90.4	1,950	1,125	2,531	660	8,120	238.8	8,249	242.6	1,154	5,106,686.00	619.07
Utah-----	6,399	73.0	4,528	1,871	5,477	1,244	13,937	181.9	16,122	184.0	4,125	14,883,354.00	923.17
Vermont-----	489	59.6	373	116	373	138	1,296	157.9	1,321	160.9	417	1,642,981.00	1,243.74
Virginia-----	557	150.9	387	170	438	147	1,234	334.4	1,281	347.2	337	1,516,513.00	1,183.85
Washington-----	3,844	108.5	2,300	1,544	2,955	1,024	11,037	311.5	11,134	314.3	2,562	10,698,331.00	960.87
West Virginia-----	2,328	89.5	1,418	910	1,751	642	7,152	275.0	7,217	277.5	2,080	8,166,238.00	1,131.53
Wisconsin-----	2,902	147.8	1,893	1,009	1,963	484	5,364	273.3	5,618	286.2	1,026	3,682,723.00	655.52
Wyoming-----	5,144	136.0	3,604	1,540	3,456	1,510	15,087	398.8	15,035	397.4	3,675	18,697,559.00	1,243.60
Prolonged Care <sup>3</sup> -----	4,965	131.2	3,434	1,531	3,286	1,510	15,057	398.0	15,006	396.7	3,604	18,389,877.00	1,225.50
Wyoming-----	268	88.2	162	106	186	80	641	210.9	654	215.1	150	722,968.00	1,105.46

<sup>1</sup> Rate per 100,000 estimated civilian population.

<sup>2</sup> Total maintenance expenditures divided by the average daily resident patient population.

<sup>3</sup> Prolonged care hospitals comprise the state and county mental hospitals only. Public hospitals, in addition, include the state psychopathic hospitals.

TABLE 2

MOVEMENT AND ADMINISTRATIVE DATA FOR PUBLIC MENTAL HOSPITALS: UNITED STATES AND EACH STATE, FISCAL YEAR 1957

	All Admissions Excluding Transfers		First Admissions	Readmissions	Discharges	Deaths in Hospital	Resident Patients at End of Year		Average Daily Resident Patient Population		Total Full-time Employees at End of Year	Maintenance Expenditures	
	Number	Rate <sup>1</sup>					Number	Rate <sup>1</sup>	Number	Rate <sup>1</sup>		Total	Per Patient <sup>2</sup>
United States-----	196,022	116.4	130,460	65,562	145,397	47,078	548,563	325.7	549,496	326.3	162,885	\$729,463,516.00	\$1,327.51
Prolonged Care <sup>3</sup> -----	191,507	113.7	127,263	64,244	141,286	46,968	547,427	323.1	548,380	323.6	160,490	720,616,202.00	1,334.08
Alabama-----	2,510	80.3	1,698	812	1,906	496	7,324	234.3	7,337	234.7	1,370	5,761,686.00	785.29
Arizona-----	825	74.3	696	129	903	161	1,595	143.6	1,624	146.2	526	2,430,116.00	1,440.96
Arkansas-----	2,183	125.2	1,310	873	1,943	399	4,907	281.4	4,888	280.3	1,440	4,879,913.00	998.35
California-----	18,672	137.3	12,565	6,107	15,193	2,529	36,606	269.2	36,553	268.8	11,180	49,761,104.00	1,361.34
Prolonged Care <sup>3</sup> -----	18,499	136.0	12,478	6,021	15,008	2,529	36,545	268.7	36,479	268.2	11,102	48,989,086.00	1,342.94
Colorado-----	1,723	105.6	1,334	389	1,456	559	5,730	351.1	5,695	349.0	2,072	9,170,265.00	1,610.23
Prolonged Care <sup>3</sup> -----	995	61.0	800	195	742	556	5,649	346.1	5,622	344.7	1,914	8,460,316.00	1,594.06
Connecticut-----	4,533	202.4	2,776	1,757	3,395	1,064	8,720	389.3	8,663	387.0	3,333	16,956,392.00	1,944.74
Delaware-----	946	220.0	673	273	748	183	1,737	424.0	1,739	424.4	746	2,768,754.00	1,592.73
Prolonged Care <sup>3</sup> -----	536	124.7	393	141	443	98	1,414	328.8	1,401	325.8	526	2,003,530.00	1,431.50
District of Columbia-----	1,615	199.6	1,203	412	1,014	507	7,003	865.6	6,994	864.5	2,741	14,683,389.00	2,099.43
Florida-----	2,582	64.5	2,028	554	1,169	577	8,278	206.9	8,217	205.4	2,279	7,738,736.00	941.80
Georgia-----	3,519	95.1	2,579	940	2,634	964	11,852	320.4	11,828	319.8	2,041	10,264,373.00	867.80
Iaaho-----	1,081	170.0	683	398	826	173	1,100	173.0	1,137	178.8	386	1,582,792.00	1,392.08
Illinois-----	15,099	157.5	8,336	6,763	11,687	3,693	36,879	384.8	37,031	386.3	9,248	42,136,699.00	1,137.88
Indiana-----	3,864	85.4	2,625	1,239	2,957	851	10,955	262.1	10,929	261.5	3,932	16,212,619.00	1,099.43
Prolonged Care <sup>3</sup> -----	3,612	79.8	2,426	1,186	2,742	849	10,854	239.9	10,832	239.4	3,585	14,746,765.00	1,361.41
Iowa-----	2,848	101.9	1,522	1,326	2,473	457	5,038	180.2	5,018	179.5	1,947	6,926,845.00	1,380.40
Prolonged Care <sup>3</sup> -----	2,558	91.5	1,274	1,284	2,187	457	5,003	178.9	4,971	177.8	1,829	6,534,277.00	1,314.48
Kansas-----	1,704	81.3	1,171	533	1,650	264	4,372	208.7	4,375	208.8	2,266	8,728,029.00	1,994.98
Kentucky-----	3,081	102.7	1,634	1,447	2,256	668	7,341	244.8	7,259	242.0	2,211	8,697,483.00	1,994.98
Louisiana-----	3,175	104.9	2,174	1,001	2,514	479	8,298	279.5	8,265	273.0	2,267	7,149,952.00	1,865.09
Maine-----	833	89.9	563	268	574	211	2,962	319.5	2,953	318.6	904	3,564,427.00	1,207.05
Maryland-----	4,376	154.8	3,074	1,302	3,802	901	9,311	329.4	9,513	336.5	2,885	14,084,229.00	1,560.52
Massachusetts-----	8,655	179.9	6,507	2,148	7,327	2,172	22,092	459.3	22,245	462.5	7,408	34,724,004.00	1,560.98
Prolonged Care <sup>3</sup> -----	7,928	164.8	5,972	1,956	6,560	2,169	21,964	456.6	22,117	459.8	7,184	33,656,618.00	1,521.75
Michigan-----	5,613	72.1	3,823	1,790	3,288	1,512	21,769	279.5	21,943	281.8	6,734	38,820,604.00	1,721.90
Prolonged Care <sup>3</sup> -----	5,390	69.2	3,656	1,734	3,086	1,511	21,705	278.7	21,865	280.8	6,518	37,649,430.00	1,721.90
Minnesota-----	4,600	138.8	2,408	2,192	3,548	1,185	11,173	337.0	11,304	348.1	2,943	12,889,033.00	1,440.22
Mississippi-----	2,929	135.1	1,904	1,025	2,475	349	5,366	247.5	5,378	248.0	1,460	4,913,683.00	1,779.78
Missouri-----	1,958	46.4	1,291	667	1,391	672	11,923	282.5	11,673	276.3	3,740	13,851,249.00	1,186.61
Montana-----	919	139.2	277	1,020	1,762	192	1,762	267.0	1,818	275.5	476	1,148,438.00	1,181.76
Nebraska-----	1,860	129.3	903	760	1,853	376	4,586	318.7	4,602	324.8	2,131	7,692,748.00	1,645.86
Prolonged Care <sup>3</sup> -----	1,486	103.3	726	760	1,548	371	4,477	313.8	4,602	319.8	1,845	6,832,635.00	1,484.71
Nevada-----	265	103.1	213	52	199	35	477	185.6	455	177.0	105	588,410.00	1,293.21
New Hampshire-----	975	172.6	695	280	767	256	2,586	457.7	2,623	464.2	966	3,842,103.00	1,464.77

New Jersey-----	8,124	145.6	5,724	2,400	5,080	2,476	21,910	392.7	21,806	390.8	7,857	35,296,300.00	1,618.65
New Mexico-----	516	64.1	354	162	301	82	953	118.4	958	119.0	422	1,485,106.00	1,550.22
New York-----	22,723	143.5	16,550	6,163	13,067	8,636	95,814	605.2	95,969	606.1	28,077	138,601,080.00	1,444.23
Prolonged Care <sup>3</sup> -----	22,223	140.5	16,264	5,989	12,604	8,634	95,766	604.9	95,915	605.8	27,990	138,200,137.00	1,440.86
North Carolina-----	4,279	96.9	2,955	1,324	3,545	630	9,669	218.9	9,726	220.2	2,934	11,417,336.00	1,173.90
North Dakota-----	979	152.0	746	233	767	140	1,814	281.7	1,848	287.0	502	2,207,377.00	1,194.47
Ohio-----	11,205	122.1	7,648	3,557	9,177	2,229	27,770	302.5	27,902	303.9	7,953	37,231,176.00	1,334.36
Oklahoma-----	2,218	98.9	1,333	885	1,827	518	7,612	339.4	7,663	341.6	2,107	7,002,769.00	913.84
Oregon-----	3,126	177.2	2,052	1,074	2,293	527	5,044	285.9	5,044	285.9	1,444	5,760,747.00	1,142.10
Pennsylvania-----	8,022	72.8	5,435	2,587	4,383	3,047	39,343	357.0	39,690	360.2	12,206	54,406,707.00	1,370.79
Prolonged Care <sup>3</sup> -----	7,735	70.2	5,266	2,469	4,279	3,045	39,204	355.8	39,617	359.5	11,758	53,896,197.00	1,360.43
Rhode Island-----	1,620	195.2	997	623	1,148	428	3,396	409.2	3,402	409.9	958	3,916,589.00	1,151.26
South Carolina-----	2,350	101.8	1,747	603	1,818	466	6,304	273.1	6,220	269.0	1,421	5,294,858.00	851.26
South Dakota-----	808	116.3	532	276	660	141	1,660	238.8	1,640	236.5	462	1,559,451.00	950.88
Tennessee-----	3,849	111.8	2,440	1,409	3,145	699	8,236	239.2	8,134	236.2	1,437	5,824,664.00	716.09
Prolonged Care <sup>3</sup> -----	3,491	101.4	2,205	1,286	2,793	697	8,183	237.7	8,084	234.8	1,299	5,470,544.00	676.71
Texas-----	7,100	79.3	4,685	2,415	5,727	1,363	15,846	177.0	15,811	176.6	4,474	17,585,000.00	1,112.20
Utah-----	509	60.1	378	131	259	94	1,305	154.1	1,296	153.0	430	1,668,701.00	1,287.58
Vermont-----	529	141.4	346	183	389	154	1,241	331.8	1,248	333.7	398	1,548,468.00	1,240.76
Virginia-----	4,116	113.1	2,465	1,651	2,890	1,017	11,020	302.9	10,965	301.4	2,691	11,429,926.00	1,042.40
Washington-----	2,408	90.8	1,371	1,037	1,836	635	6,842	257.9	6,994	263.6	2,172	9,775,007.00	1,370.63
West Virginia-----	2,904	147.0	1,782	1,122	2,050	427	5,401	273.5	5,371	271.9	1,142	4,314,407.00	803.28
Wisconsin-----	5,441	141.1	3,674	1,767	3,862	1,406	15,016	389.3	15,044	390.0	3,898	20,288,575.00	1,348.62
Prolonged Care <sup>3</sup> -----	5,208	135.0	3,446	1,762	3,649	1,406	14,984	388.5	15,009	389.1	3,823	19,910,120.00	1,326.55
Wyoming-----	263	85.1	160	103	205	73	615	199.0	629	203.6	163	792,190.00	1,259.44

<sup>1</sup> Rate per 100,000 estimated civilian population.

<sup>2</sup> Total maintenance expenditures divided by the average daily resident patient population.

<sup>3</sup> Prolonged care hospitals comprise the state and county mental hospitals only. Public hospitals, in addition, include the state psychopathic hospitals.

The data presented for 1956 are final figures obtained from the schedules submitted for the annual census of mental patients, and, with the exception of estimates for two hospitals (for maintenance expenditures only), represent the actual experience of the public mental hospitals in the United States.

The figures presented for 1957 are estimates obtained from a special questionnaire sent to public mental hospitals requesting gross data on the movement of mental hospital populations so that early publication could be achieved. Since these data are obtained shortly after the close of the fiscal year they are provisional and, therefore, subject to change. However, experience has indicated that changes between provisional and final data are negligible.

This report includes data from all of the 220 state and the 48 county prolonged care hospitals for the mentally ill as well as the 12 psychopathic hospitals which are primarily short-term teaching or intensive treatment facilities. In order to maintain continuity with each of the two series mentioned above the tables presented in this report show totals for both prolonged care hospitals and all mental hospitals for those states which have psychopathic hospitals. It is expected that the next report in this series will show final data for 1957 and estimates for 1958 in essentially the same format as is used here.

There was a decrease of 2,827 patients in the 1957 year-end resident populations of these hospitals, a drop of 0.5 per cent. This was the

second successive year in which a decrease occurred in the resident population of the nation's public mental hospitals. However, this decrease was not nearly as large as the drop of 1.4 per cent which occurred between year-end 1955 and 1956. Furthermore, the 1957 decrease occurred in only 28 of the 48 states and the District of Columbia as compared to 39 states in 1956.

Tables 1 and 2 present data for each state for 1956 and 1957 respectively. Table 3 shows the number of patient transactions occurring in the public mental hospitals in the United States, the number of personnel employed full time, the total amount spent for maintenance of these hospitals for 1956 and 1957 and the percent change between these two years for each of these items. The percentage change between 1955 and 1956 for each of these items is also presented. It is interesting to note that admissions showed a greater per cent increase and discharges a smaller per cent increase during the period 1956-57 than in the period 1955-56 while deaths decreased during this period as compared to an increase during 1955-56. This is consistent with the fact that the decrease in the resident population in 1957 was not as great as that in 1956. The decrease of 2.4 per cent in the number of deaths between 1956 and 1957 is quite striking in view of the fact that there was a substantial increase of 8.6 per cent between 1955 and 1956. There are no data available at this time which would indicate the reason for this change.

TABLE 3  
MOVEMENT OF PATIENT POPULATION IN PUBLIC MENTAL HOSPITALS: UNITED STATES 1955-1957

ITEM	1955	1956	1957	Per cent Change	
				1956-57	1955-56
All Admissions-----	178,020	185,597	196,022	5.6	4.3
First Admissions-----	122,394	125,539	130,460	3.9	2.6
Readmissions-----	55,626	60,058	65,562	9.2	8.0
Discharges-----	119,146	133,208	145,397	9.2	11.8
Deaths in Hospital-----	44,400	48,236	47,078	-2.4	8.6
Resident Patients at End of Year-----	559,281	551,390	548,563	-0.5	-1.4
Personnel Employed Full Time at End of Year	145,462	153,715	162,885	6.0	5.7
Maintenance Expenditures					
Total-----	\$618,229,797.00	\$663,280,934.00	\$729,463,516.00	10.0	7.3
Per Patient-----	1,112.84	1,194.88	1,327.51	11.1	7.4



For the United States as a whole there were 548,563 patients resident in the public mental hospitals at the end of 1957 which yielded a rate of 325.7 per 100,000 civilian population, a decrease of 2.3 per cent from the rate of 333.5 at the end of 1956. This rate ranged from a low of 118.4 in New Mexico to a high of 605.2 in New York as compared with a range of 115.9 in New Mexico to 610.6 in New York at the end of 1956. The District of Columbia was not included in the computation of this range since a substantial number of patients resident in the hospital are not residents of the District of Columbia.

It should be noted that the average daily resident patient rates differ only slightly from those obtained using the number of resident patients at the end of the year. Figure 1 shows the geographic distribution of the average daily resident patient rate per 100,000 civilian population for 1957. These rates are highest in the northeastern and east central states and lowest in the south central and west central states.

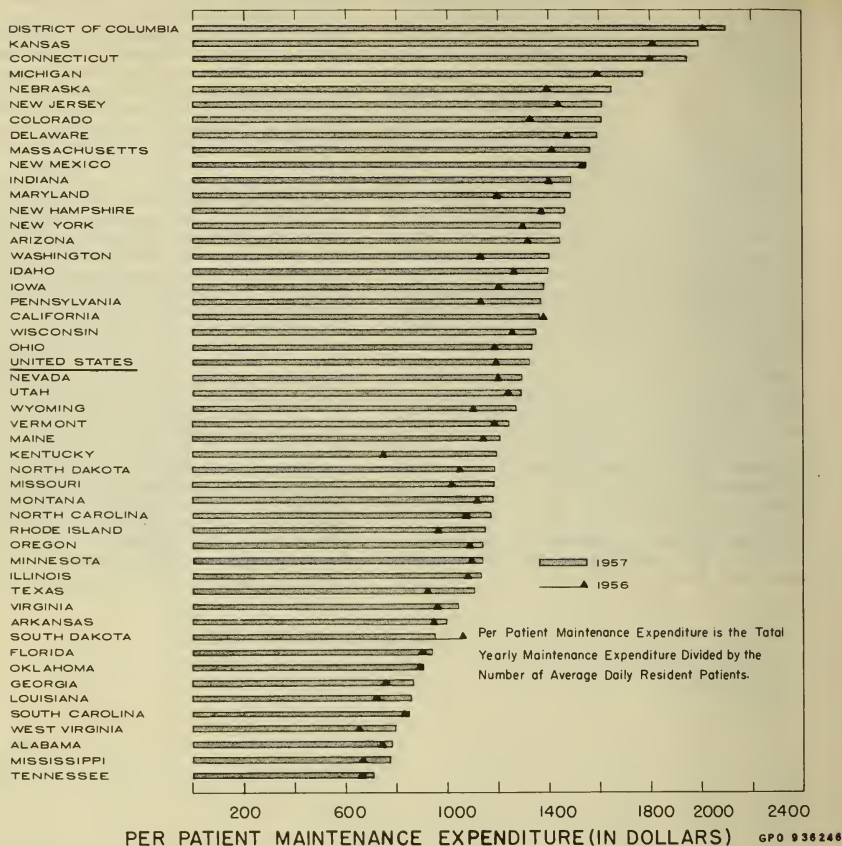
There were 196,022 patients admitted to the public mental hospitals of the United States in 1957. This yielded an admission rate of 116.4 per 100,000 civilian population as compared to a rate of 112.3 in 1956, an increase of 3.7 per cent. This rate ranged from a low of 46.4 in Missouri to a high of 220.0 in Delaware as compared to a range of 43.5 in Missouri to 236.1 in Delaware in 1956.

The per patient expenditure for the maintenance of public mental hospitals in the United States was \$1,327.51 for 1957, or \$3.64 per

patient day, as compared to \$1,194.88 in 1956, or \$3.25 per patient per day. This represents an increase of 11.1 per cent between 1956 and 1957. These expenditures for 1957 range from a low of \$716.09 per patient per year in Tennessee to a high of \$2,099.43 in the District of Columbia. The corresponding range in 1956 was from a low of \$655.35 in Tennessee to a high of \$2,012.23 in the District of Columbia. Figure 2 shows the per patient maintenance expenditure in rank order by state for 1957 with the corresponding 1956 values.

The interpretation of differences among states in the movement of patient population and personnel and expenditure data should be made with caution. Differences in the age, sex and diagnostic distributions of first admissions and resident patients, distributions of personnel by type of personnel and maintenance expenditures by type of expenditure, which will be available at a later date, will provide a partial explanation for some of these differences. However, in order to understand fully interstate differences it is necessary to take into account such additional factors as policies and laws affecting the admission and release of patients, existence of other facilities for the mentally ill in the community, the extent and effectiveness of various therapeutic programs and many others. Thus, these data present a picture of the movement of the mental hospital population indicating the relative size of the problem in each state, but do not provide a comparison of the relative effectiveness of mental hospital programs.

PER PATIENT MAINTENANCE EXPENDITURES IN ALL PUBLIC HOSPITALS FOR THE CARE  
OF THE MENTALLY ILL 1956 AND 1957



DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE  
NATIONAL INSTITUTES OF HEALTH  
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# Current Reports

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

May, 1958

Bethesda 14, Maryland

Series MHB-H-3 (Rev.)

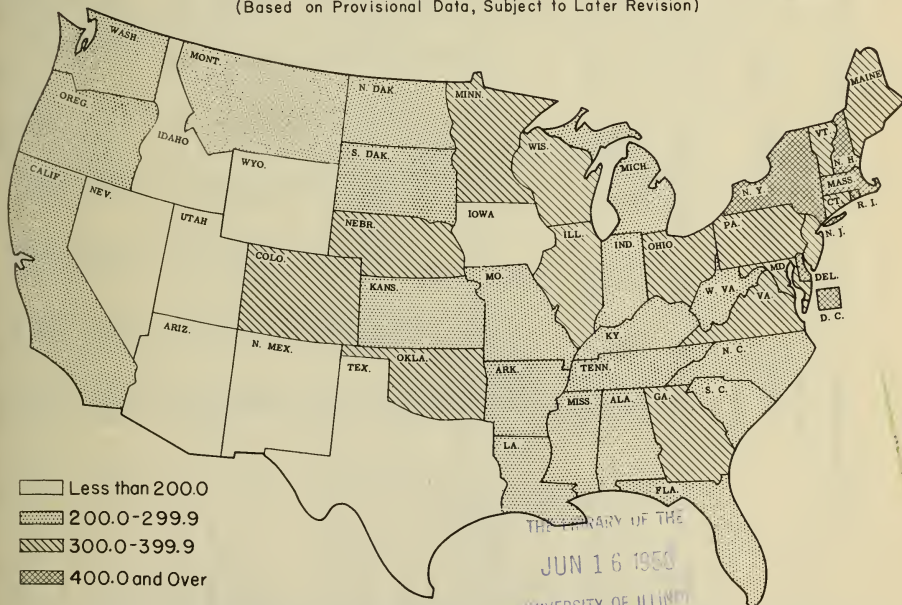
REVISED PROVISIONAL DATA ON  
PATIENTS IN PUBLIC HOSPITALS FOR THE CARE OF THE MENTALLY ILL  
1956 and 1957

This is the first in a new series of reports which will replace the publication "Patients in Public Hospitals for the Prolonged Care of the Mentally Ill" previously published in the

Current Reports Series<sup>1</sup> and "Mental Patient Data for Fiscal Year" which appeared in Public Health Reports<sup>2</sup>.

AVERAGE DAILY RESIDENT PATIENTS IN PUBLIC HOSPITALS FOR MENTAL DISEASE PER 100,000 CIVILIAN POPULATION:1957

(Based on Provisional Data, Subject to Later Revision)



<sup>1</sup> The most recent in this series was "Patients in Public Hospitals for the Prolonged Care of the Mentally Ill, 1955" Series MHB-H-2, December 1956.

<sup>2</sup> The most recent in this series was "Mental Patient Data for Fiscal Year 1956", Public Health Reports, Vol. 72, No. 1, January 1957.

For sale by the Superintendent of Documents, U. S. Government Printing Office  
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TABLE 1

## PROVISIONAL MOVEMENT AND ADMINISTRATIVE DATA FOR PUBLIC MENTAL HOSPITALS: UNITED STATES AND EACH STATE FISCAL YEAR 1956

	All Admissions Excluding Transfers		First Admissions	Discharges	Deaths in Hospital	Resident Patients at end of Year		Average Daily Resident Patient Population		Total Full-time Employees at end of Year	Maintenance Expenditures	
	Number	Rate <sup>1</sup>				Number	Rate <sup>1</sup>	Number	Rate <sup>1</sup>		Total	Per Patient <sup>2</sup>
United States-----	185,577	112.3	125,439	133,208	48,236	551,390	333.5	555,103	335.7	153,715	\$663,280,934.00	\$1,194.88
Prolonged Care <sup>3</sup> -----	181,477	109.8	122,585	129,356	48,113	550,456	332.9	554,157	335.2	151,769	656,230,633.00	1,184.20
Alabama-----	2,294	74.1	1,581	1,581	438	7,277	235.1	7,240	233.9	1,366	5,404,035.00	746.41
Arizona-----	830	78.1	748	640	151	1,639	154.2	1,669	157.0	1,268	2,202,551.00	1,319.68
Arkansas-----	2,141	123.1	1,400	1,713	364	4,938	285.1	4,997	285.0	1,366	4,703,446.00	948.85
California-----	18,276	139.1	12,376	15,000	2,802	37,365	284.4	36,985	281.5	9,991	50,397,326.00	1,362.64
Prolonged Care <sup>3</sup> -----	18,023	137.2	12,245	14,773	2,799	37,273	283.7	36,909	281.0	9,783	49,604,442.00	1,343.97
Colorado-----	1,709	108.4	1,349	1,229	605	5,628	356.9	5,696	361.2	1,879	7,576,223.00	1,330.10
Prolonged Care <sup>3</sup> -----	975	61.8	808	591	603	5,558	352.4	5,656	356.8	1,735	6,899,418.00	1,226.35
Connecticut-----	4,209	150.3	2,558	3,042	1,030	8,552	385.8	8,668	391.9	3,322	15,551,993.00	1,794.18
Delaware-----	968	256.1	947	842	214	1,674	408.3	1,696	413.7	620	2,802,433.00	1,475.18
Prolonged Care <sup>3</sup> -----	520	128.8	371	431	123	1,566	353.2	1,586	358.0	442	1,845,445.00	1,530.05
District of Columbia-----	1,327	164.0	909	1,147	595	7,086	875.9	7,120	880.1	2,667	14,327,083.00	2,012.23
Florida-----	1,879	49.5	1,480	399	558	8,069	212.7	8,035	211.8	2,285	7,145,203.00	889.26
Georgia-----	3,383	93.1	2,681	702	934	11,844	326.0	11,738	323.1	2,011	8,971,759.00	764.33
Idaho-----	1,082	174.2	665	417	173	1,179	189.9	1,182	190.3	355	1,476,764.00	1,269.55
Illinois-----	14,447	153.3	8,341	6,106	3,813	37,323	396.0	37,633	399.3	8,950	40,601,783.00	1,078.89
Indiana-----	3,784	85.4	2,610	2,821	940	10,908	246.2	11,021	248.8	3,914	15,453,888.00	1,402.22
Prolonged Care <sup>3</sup> -----	3,485	78.7	2,406	2,486	939	10,820	244.2	10,919	246.5	3,548	13,941,429.00	1,276.80
Iowa-----	2,986	108.5	1,604	2,509	584	5,088	184.9	5,151	187.2	1,946	6,179,622.00	1,199.69
Prolonged Care <sup>3</sup> -----	2,688	97.7	1,349	2,236	583	5,041	183.2	5,108	185.6	1,843	5,813,332.00	1,138.08
Kansas-----	1,711	83.0	1,195	516	279	4,394	213.2	4,427	214.8	2,170	8,035,908.00	1,815.20
Kentucky-----	2,728	92.0	1,472	1,255	736	7,335	247.2	7,490	252.5	1,588	6,565,448.00	785.87
Louisiana-----	2,892	97.5	1,762	2,108	451	8,264	278.3	8,263	278.3	1,984	5,904,263.00	715.77
Maine-----	898	98.0	621	277	264	2,981	325.4	3,004	327.9	894	3,424,602.00	1,140.01
Maryland-----	3,641	132.3	2,449	2,417	851	9,339	338.9	9,617	349.3	2,682	11,549,201.00	1,409.92
Massachusetts-----	7,853	164.8	6,044	4,462	2,195	22,202	465.8	22,785	478.1	7,366	32,110,189.00	1,200.27
Prolonged Care <sup>3</sup> -----	7,049	147.9	5,464	1,585	2,192	22,105	463.8	22,656	475.4	7,131	31,142,388.00	1,374.58
Michigan-----	5,032	66.5	3,360	2,915	1,521	21,469	283.8	21,616	285.7	6,716	34,313,765.00	1,587.42
Prolonged Care <sup>3</sup> -----	4,956	65.5	3,287	2,874	1,521	21,436	283.4	21,583	285.3	6,500	33,849,310.00	1,568.33
Minnesota-----	4,647	142.8	2,529	3,518	1,130	11,356	348.9	11,430	351.2	2,901	4,12,573,653.00	1,110.06
Mississippi-----	2,819	132.0	1,748	2,452	422	5,224	244.7	5,228	244.9	1,405	3,487,168.00	667.02
Missouri-----	1,815	43.2	1,286	1,182	711	11,973	282.0	11,912	280.9	3,229	12,015,213.00	1,008.66
Montana-----	1,344	104.8	867	1,048	216	1,846	387.0	1,850	387.0	577	2,505,403.00	1,250.83
Nebraska-----	1,730	122.3	1,102	1,397	448	4,756	330.6	4,756	330.6	1,077	2,505,343.00	1,352.23
Prolonged Care <sup>3</sup> -----	1,484	105.0	935	549	447	4,690	331.7	4,667	330.1	1,877	5,987,975.00	1,283.05
Nevada-----	231	93.1	196	35	30	439	177.0	446	179.8	90	536,814.00	1,203.62
New Hampshire-----	928	166.3	681	247	313	2,600	465.9	2,667	478.0	866	3,673,647.00	1,377.45
New Jersey-----	7,759	141.9	5,319	2,240	2,548	22,022	402.7	21,909	400.7	7,413	31,344,734.00	1,370.68



New Mexico-----	550	69.9	380	170	467	76	912	115.9	971	123.4	407	1,483,106.00	1,529.46
New York-----	22,357	141.8	16,436	5,921	11,598	8,437	96,266	610.6	96,767	613.8	25,709	126,076,129.00	1,302.88
Prolonged Care <sup>2</sup> -----	21,886	138.8	16,108	5,778	11,116	8,436	96,212	610.2	96,711	613.4	25,619	125,685,365.00	1,299.60
North Carolina-----	3,551	82.1	2,341	1,210	2,971	518	9,794	226.4	9,874	228.2	2,851	10,570,091.00	1,070.50
North Dakota-----	906	141.1	607	299	686	159	1,886	293.8	1,923	299.5	518	2,010,901.00	1,045.71
Ohio-----	10,848	119.8	7,478	3,370	8,408	2,302	28,057	317.0	28,344	313.1	7,834	33,459,122.00	1,180.47
Oklahoma-----	2,259	102.1	1,371	888	1,541	577	7,835	354.0	7,897	356.8	2,132	7,110,393.00	900.39
Oregon-----	3,075	178.0	2,102	973	2,215	541	4,980	288.2	4,956	286.8	1,451	5,446,034.00	1,098.88
Pennsylvania-----	7,224	66.3	5,118	2,116	3,923	3,308	39,947	366.0	40,357	369.7	11,443	45,735,668.00	1,133.28
Rhode Island-----	1,491	182.7	952	539	968	451	3,402	416.9	3,413	418.3	853	3,285,689.00	962.70
South Carolina-----	2,343	103.0	1,782	561	1,736	455	6,224	273.6	6,113	268.7	1,371	5,105,768.00	835.72
South Dakota-----	750	109.3	508	242	571	169	1,613	235.1	1,602	233.5	451	1,702,187.00	1,062.54
Tennessee-----	3,387	99.6	2,179	1,208	2,833	660	8,169	240.3	8,294	243.9	1,293	5,435,491.00	655.35
Prolonged Care <sup>2</sup> -----	3,075	90.4	1,950	1,125	2,531	660	8,120	238.8	8,249	242.6	1,154	5,105,686.00	619.07
Texas-----	6,399	73.0	4,528	1,871	5,477	1,244	15,937	181.9	16,122	184.0	4,125	14,883,354.00	923.17
Utah-----	489	59.6	373	116	373	138	1,296	157.9	1,321	160.9	417	1,642,981.00	1,243.74
Vermont-----	557	150.9	387	170	438	147	1,234	334.4	1,281	347.2	337	1,516,513.00	1,183.85
Virginia-----	3,844	108.5	2,300	1,540	2,955	1,024	11,037	311.5	11,134	314.3	2,562	10,698,331.00	960.87
Washington-----	2,328	89.5	1,418	910	1,751	642	7,152	275.0	7,217	277.5	2,080	8,166,238.00	1,131.53
West Virginia-----	2,302	147.8	1,893	1,009	1,963	484	5,364	273.3	5,618	286.2	1,026	3,687,723.00	655.52
Wisconsin-----	5,144	136.0	3,604	1,540	3,456	1,510	15,087	398.8	15,035	397.4	3,675	18,697,559.00	1,243.60
Prolonged Care <sup>2</sup> -----	4,965	131.2	3,434	1,531	3,286	1,510	15,057	398.0	15,006	396.7	3,604	18,389,877.00	1,225.50
Wyoming-----	268	88.2	162	106	186	80	641	210.9	654	215.1	150	722,968.00	1,105.46

<sup>1</sup> Rate per 100,000 estimated civilian population.

<sup>2</sup> Total maintenance expenditures divided by the average daily resident patient population.

<sup>3</sup> Prolonged care hospitals comprise the state and county mental hospitals only. Public hospitals, in addition, include the state psychopathic hospitals.

<sup>4</sup> Estimated by the Biometrics Branch, National Institute of Mental Health.

TABLE 2

PROVISIONAL MOVEMENT AND ADMINISTRATIVE DATA FOR PUBLIC MENTAL HOSPITALS: UNITED STATES AND EACH STATE, FISCAL YEAR 1957

STATE	All Admissions Excluding Transfers		First Admis- sions	Readmis- sions	Dis- charges	Deaths in Hospital	Resident Patients at end of Year		Average Daily Resident Patient Popu- lation		Total Full-time Employees at End of Year	Maintenance Expenditures	
	Number	Rate <sup>1</sup>					Number	Rate <sup>1</sup>	Number	Rate <sup>1</sup>		Total	Per Patient <sup>2</sup>
United States-----	194,979	115.8	129,668	65,311	145,454	46,772	548,431	325.7	549,376	326.2	162,114	\$732,180,096	\$1,332.75
Prolonged Care <sup>3</sup> -----	190,470	113.1	126,457	64,013	141,343	46,659	547,299	325.0	548,274	325.6	159,617	723,383,135	1,319.20
Alabama-----	2,510	80.3	1,698	812	1,907	496	7,324	234.3	7,331	234.5	1,364	5,527,419	793.98
Arizona-----	825	74.3	696	129	629	161	1,595	143.6	1,624	146.2	526	2,340,116	140.96
Arkansas-----	2,183	125.2	1,310	873	1,943	399	4,907	281.4	4,888	280.3	1,458	4,879,913	998.35
California-----	18,531	136.3	12,369	6,162	15,243	2,488	36,880	271.2	36,586	269.0	10,535	4,581,930	4,581.93
Prolonged Care <sup>3</sup> -----	18,358	135.0	12,254	6,104	15,160	2,488	36,801	270.6	36,512	268.5	10,328	4,571,364	4,571.36
Colorado-----	1,723	105.6	1,334	389	1,364	559	5,730	351.1	5,694	348.9	2,072	8,880,178	1,559.57
Prolonged Care <sup>3</sup> -----	1,695	104.0	1,306	380	1,336	559	5,649	346.1	5,624	346.6	1,914	8,170,230	1,432.74
Connecticut-----	4,527	202.1	2,776	1,751	3,192	1,054	8,722	389.4	8,668	387.0	3,590	16,762,788	1,933.87
Delaware-----	1,250	120.0	884	366	1,268	188	1,144	328.6	1,108	324.2	416	2,693,453	1,250.69
Prolonged Care <sup>3</sup> -----	1,250	120.0	884	366	1,268	188	1,144	328.6	1,108	324.2	416	2,693,453	1,250.69
District of Columbia <sup>4</sup> -----	1,615	199.6	1,203	412	1,014	507	7,003	865.6	6,994	864.5	2,741	14,683,389	2,059.43
Florida-----	2,050	51.2	1,676	374	1,214	572	8,278	206.9	8,217	205.4	2,292	7,814,599	951.03
Georgia-----	3,519	95.1	2,579	940	2,634	964	11,852	320.4	11,828	319.8	2,083	10,106,034	854.42
Idaho-----	1,086	170.8	672	414	1,029	173	1,100	173.0	1,137	178.8	381	1,547,509	1,361.05
Illinois-----	15,099	157.5	8,336	6,763	11,687	3,693	36,879	384.8	37,031	386.3	9,261	42,136,699	1,137.88
Indiana-----	3,864	85.4	2,625	1,239	2,957	851	10,955	242.1	10,929	241.5	3,932	16,194,626	1,481.80
Prolonged Care <sup>3</sup> -----	3,612	79.8	2,426	1,186	2,742	849	10,854	239.9	10,832	239.4	3,585	14,728,772	1,359.75
Iowa-----	2,849	101.9	1,534	1,315	2,403	419	5,038	180.2	5,028	179.8	1,949	6,933,097	1,378.90
Prolonged Care <sup>3</sup> -----	2,559	91.5	1,286	1,173	2,117	419	5,003	178.9	4,980	178.1	1,840	6,540,529	1,313.36
Kansas-----	1,704	81.3	1,168	536	1,650	264	4,372	208.7	4,375	208.8	2,266	8,728,029	1,378.90
Nevada-----	3,071	101.3	1,804	1,267	2,438	668	7,111	244.8	7,239	242.0	2,087	7,073,199	974.40
Louisiana-----	2,070	100.1	1,001	1,069	2,438	211	5,270	319.5	5,253	318.6	2,517	7,222,411	1,378.90
Maine-----	828	89.3	565	263	567	211	2,962	319.5	2,955	318.6	904	3,267,427	1,207.05
Maryland <sup>4</sup> -----	4,376	154.8	3,074	1,302	3,802	901	9,311	329.4	9,513	336.5	2,885	14,084,229	1,560.32
Prolonged Care <sup>3</sup> -----	4,376	154.8	3,074	1,302	3,802	901	9,311	329.4	9,513	336.5	2,885	14,084,229	1,560.32
Massachusetts <sup>4</sup> -----	8,655	179.9	6,507	2,148	7,327	1,272	22,092	459.3	22,245	462.5	7,408	34,724,004	1,480.98
Prolonged Care <sup>3</sup> -----	7,928	164.8	5,972	1,956	6,560	1,169	21,964	456.6	22,117	459.8	7,184	33,656,018	1,521.75
Michigan-----	5,611	72.0	3,782	1,829	3,288	1,448	21,927	281.5	21,839	280.4	6,997	38,978,947	1,781.43
Prolonged Care <sup>3</sup> -----	5,388	69.2	3,615	1,773	3,088	1,448	21,863	280.7	21,775	279.6	6,756	37,813,372	1,736.83
Minnesota-----	4,600	138.8	2,408	2,192	3,548	1,185	11,173	337.0	11,304	341.0	2,943	12,796,974	1,137.41
Mississippi-----	2,915	134.5	1,897	1,018	2,475	349	5,226	241.1	5,275	243.3	1,452	3,776,298	716.27
Missouri-----	1,905	45.1	1,390	515	1,384	672	11,655	275.9	11,680	276.5	3,705	13,433,122	1,184.86
Montana-----	919	139.2	642	277	1,020	192	1,762	287.0	1,818	275.5	467	2,148,438	1,181.76
Nebraska-----	1,860	129.3	903	957	1,853	376	4,586	318.7	4,604	324.8	2,074	7,695,747	1,645.86
Nevada-----	1,250	120.0	884	366	1,268	188	1,144	328.6	1,108	324.2	416	2,693,453	1,250.69
New Hampshire-----	265	103.1	159	106	252	35	2,586	437.7	2,623	444.2	880	3,707,790	1,413.57
New Jersey-----	975	172.6	695	280	767	256	2,586	437.7	2,623	444.2	880	3,707,790	1,413.57
New Mexico-----	8,124	145.6	5,724	2,400	5,080	2,476	21,910	392.7	21,806	390.8	7,857	35,296,300	1,618.65
New York-----	516	64.1	354	162	452	82	21,953	118.4	21,958	119.0	422	1,578,356	1,647.55

New York-----	22,713	143.5	16,551	6,162	13,067	8,636	95,834	605.2	95,968	606.1	28,030	136,964,611	1,427.19
Prolonged Care <sup>3</sup>	22,253	140.5	16,265	5,988	12,604	8,634	95,766	604.9	95,914	605.8	27,943	136,557,927	1,423.75
North Carolina <sup>4</sup>	4,279	96.9	2,955	1,324	3,945	650	9,669	218.9	9,726	220.2	2,934	11,417,336	1,173.95
North Dakota-----	977	151.7	649	328	750	141	1,814	281.7	1,848	287.0	524	2,178,880	1,179.05
Ohio-----	11,205	122.1	7,641	3,564	9,176	2,227	27,770	302.5	27,902	303.9	7,912	36,249,989	1,299.19
Oklahoma-----	2,218	98.9	1,398	890	1,827	518	7,612	339.4	7,663	341.6	2,107	7,002,769	913.84
Oregon-----	5,046	172.7	5,053	993	2,178	502	5,044	287.0	5,044	285.6	1,457	5,344,179	1,099.16
Pennsylvania <sup>4</sup>	8,022	72.8	5,435	2,587	3,843	3,047	39,343	357.0	39,690	360.2	12,206	54,406,707	1,370.79
Prolonged Care <sup>3</sup>	7,735	70.2	5,266	2,469	4,273	3,045	39,204	355.8	39,617	359.5	11,758	53,896,197	1,360.45
Rhode Island-----	1,620	195.2	997	623	1,423	428	5,596	409.2	5,402	409.9	1,072	4,923,237	1,447.17
South Carolina-----	2,350	101.8	1,747	603	1,818	466	6,336	274.5	6,220	269.5	1,420	5,294,858	851.26
South Dakota-----	808	116.3	532	276	660	141	1,660	238.8	1,640	236.0	462	1,255,451	930.88
Tennessee-----	3,761	102.2	2,440	1,321	3,141	695	8,095	235.1	8,134	236.2	1,451	5,641,066	695.22
Prolonged Care <sup>3</sup>	3,403	98.6	2,201	1,198	2,785	693	8,040	233.1	8,084	234.8	1,289	5,286,946	679.64
Texas-----	6,977	77.6	4,591	2,386	5,982	1,232	15,857	177.1	15,897	177.6	4,089	15,894,466	1,287.84
Utah <sup>4</sup>	509	60.1	378	131	259	94	1,505	154.1	1,296	153.0	430	1,668,701	1,287.84
Vermont-----	529	141.4	346	183	389	154	1,241	331.8	1,248	333.7	387	1,548,469	1,240.76
Virginia-----	4,156	114.2	2,492	1,664	2,979	1,017	11,020	302.9	10,963	301.4	2,693	11,779,642	1,646.93
Washington-----	2,908	90.8	1,371	1,037	1,836	635	6,840	257.8	6,594	263.6	2,217	10,105,520	1,474.31
West Virginia <sup>4</sup>	2,904	147.0	1,782	1,122	2,050	427	5,701	273.5	5,594	271.9	1,142	7,317,407	1,403.28
Wisconsin-----	5,489	142.3	3,658	1,831	3,954	1,407	15,761	389.3	15,041	390.0	3,961	20,362,330	1,351.78
Prolonged Care <sup>3</sup>	5,263	136.4	3,444	1,818	3,737	1,407	14,984	388.5	15,006	389.1	3,886	20,016,920	1,333.93
Wyoming-----	275	89.0	170	105	217	75	616	199.4	614	198.7	165	596,525	1,357.86

<sup>1</sup> Rate per 100,000 estimated civilian population.

<sup>2</sup> Total maintenance expenditures divided by the average daily resident patient population.

<sup>3</sup> Prolonged care hospitals comprise the state and county mental hospitals only. Public hospitals, in addition, include the state psychopathic hospitals.

<sup>4</sup> Data obtained from provisional reports submitted by the state in question.

<sup>5</sup> Estimated by the Biometrics Branch, National Institute of Mental Health.

The data presented for 1956 were obtained from the schedules submitted for the annual census of mental patients, and, with the exception of estimates for two hospitals (for maintenance expenditures only), represent the actual experience of the public mental hospitals in the United States.

The majority of the statistics presented for 1957 were obtained from the schedules submitted in the annual census of mental patients. Where the census data were not available, at the time of this report, data obtained from a special questionnaire were used. Where data were not available from either of these sources estimates were made by the Biometrics Branch, NIMH and are so noted in the table. All of the data should be considered provisional and subject to change when final figures are published in Patients in Mental Institutions.

The earlier issue of this report, published in December 1957, was based on data obtained from the special questionnaire and on estimates made by the Biometrics Branch, NIMH. Reports subsequently received for the annual census of patients in mental institutions were compared with these preliminary figures. For the most part the differences between the figures published in December 1957 (MHB-H-3) and those published in this issue were minor. There was one extreme difference that should be noted. This is in the maintenance expenditures for the state of California. The earlier estimate prepared by the Biometrics Branch was \$49,761,604 while the actual amount recently reported by the state of

California Department of Mental Hygiene was \$58,290,498 a difference of \$8,529,394. However, since several of the states have reported lower maintenance expenditures than those they supplied for the earlier provisional report, the provisional maintenance expenditures now reported for all public mental hospitals in the United States of \$732,180,096 is only 0.4 per cent higher than that reported in December 1957.

This report includes data from all of the 220 state and the 48 county prolonged care hospitals for the mentally ill as well as the 12 psychopathic hospitals which are primarily short-term teaching or intensive treatment facilities. In order to maintain continuity with each of the two series mentioned above the tables presented in this report show totals for both prolonged care hospitals and all mental hospitals for those states which have psychopathic hospitals. It is expected that the next report in this series will show comparable statistics for 1957 and 1958 in essentially the same format as is used here.

There was a decrease of 2,959 patients in the 1957 year-end resident populations of these hospitals, a drop of 0.5 per cent. This was the second successive year in which a decrease occurred in the resident population of the nation's public mental hospitals. However, this decrease was not nearly as large as the drop of 1.4 per cent which occurred between year-end 1955 and 1956. Furthermore, the 1957 decrease occurred in only 30 of the 48 states and the District of Columbia as compared to 39 states in 1956.

TABLE 3

MOVEMENT OF PATIENT POPULATION IN PUBLIC MENTAL HOSPITALS: UNITED STATES 1955-1957

ITEM	1955	1956 <sup>1</sup>	1957 <sup>1</sup>	Per cent Change	
				1956-57	1955-56
All Admissions-----	178,020	185,597	194,979	5.1	4.3
First Admissions-----	122,394	125,539	129,668	3.3	2.6
Readmissions-----	55,626	60,058	65,311	8.7	8.0
Discharges-----	119,146	133,208	145,454	9.2	11.8
Deaths in Hospital-----	44,400	48,236	46,772	-3.0	8.6
Resident Patients at End of Year-----	559,281	551,390	548,431	-0.5	-1.4
Personnel Employed Full Time at End of Year	145,462	153,715	162,114	5.5	5.7
Maintenance Expenditures					
Total-----	\$618,229,797.00	\$663,280,934.00	\$732,180,096.00	10.4	7.3
Per Patient-----	1,112.84	1,194.88	1,332.75	11.5	7.4

<sup>1</sup> Based on provisional data. Subject to revision prior to final publication.



Tables 1 and 2 present data for each state for 1956 and 1957 respectively. Table 3 shows the number of patient transactions occurring in the public mental hospitals in the United States, the number of personnel employed full time, the total amount spent for maintenance of these hospitals for 1956 and 1957 and the percent change between these two years for each of these items. The percentage change between 1955 and 1956 for each of these items is also presented. It is interesting to note that admissions showed a greater per cent increase and discharges a smaller per cent increase during the period 1956-57 than in the period 1955-56 while deaths decreased during this period as compared to an increase during 1955-56. This is consistent with the fact that the decrease in the resident population in 1957 was not as great as that in 1956. The decrease of 3.0 per cent in the number of deaths between 1956 and 1957 is quite striking in view of the fact that there was a substantial increase of 8.6 per cent between 1955 and 1956. There are no data available at this time which would indicate the reason for this change.

For the United States as a whole there were 548,431 patients resident in the public mental hospitals at the end of 1957 which yielded a rate of 325.7 per 100,000 civilian population, a decrease of 2.3 per cent from the rate of 333.5 at the end of 1956. This rate ranged from a low of 118.4 in New Mexico to a high of 605.2 in New York as compared with a range of 115.9 in New Mexico to 610.6 in New York at the end of 1956. The District of Columbia was not included in the computation of this range since a substantial number of patients resident in the hospital are not residents of the District of Columbia.

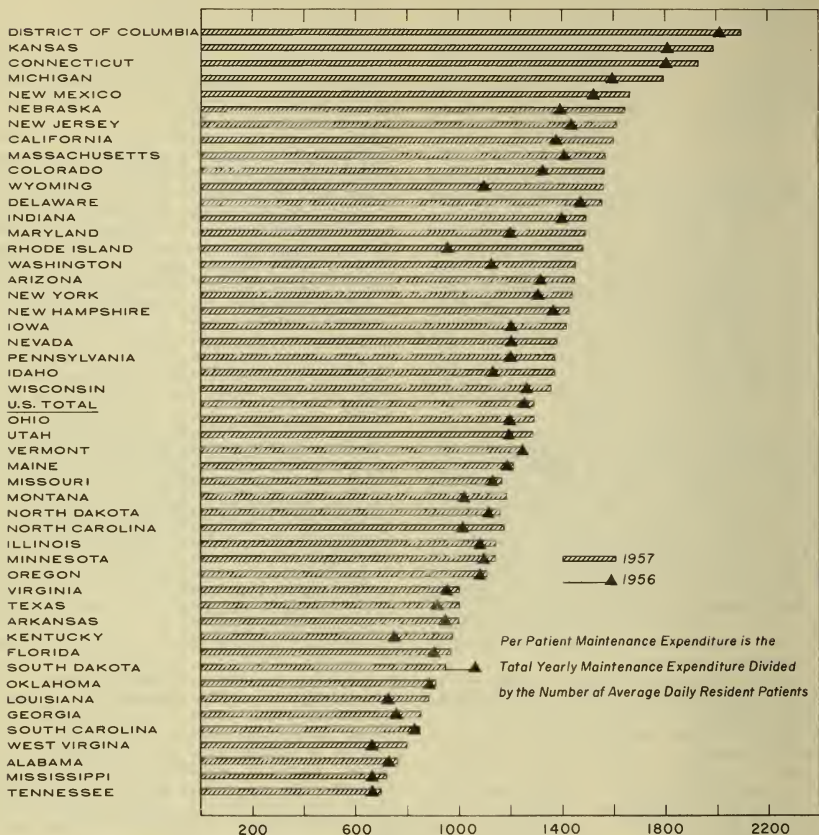
It should be noted that the average daily resident patient rates differ only slightly from those obtained using the number of resident patients at the end of the year. Figure 1 shows the geographic distribution of the average daily resident patient rate per 100,000 civilian population for 1957. These rates are highest in the northeastern and east central states and lowest in the south central and west central states.

There were 194,979 patients admitted to the public mental hospitals of the United States in 1957. This yielded an admission rate of 115.8 per 100,000 civilian population as compared to a rate of 112.3 in 1956, an increase of 3.1 per cent. This rate ranged from a low of 45.1 in Missouri to a high of 220.0 in Delaware as compared to a range of 43.5 in Missouri to 236.1 in Delaware in 1956.

The per patient expenditure for the maintenance of public mental hospitals in the United States was \$1332.75 for 1957, or \$3.65 per patient day, as compared to \$1,194.88 in 1956, or \$3.25 per patient per day. This represents an increase of 11.5 per cent between 1956 and 1957. These expenditures for 1957 range from a low of \$693.52 per patient per year in Tennessee to a high of \$2,099.43 in the District of Columbia. The corresponding range in 1956 was from a low of \$655.35 in Tennessee to a high of \$2,012.23 in the District of Columbia. Figure 2 shows the per patient maintenance expenditure in rank order by state for 1957 with the corresponding 1956 values.

The interpretation of differences among states in the movement of patient population and personnel and expenditure data should be made with caution. Differences in the age, sex and diagnostic distributions of first admissions and resident patients, distributions of personnel by type of personnel and maintenance expenditures by type of expenditure, which will be available at a later date, will provide a partial explanation for some of these differences. However, in order to understand fully interstate differences it is necessary to take into account such additional factors as policies and laws affecting the admission and release of patients, existence of other facilities for the mentally ill in the community, the extent and effectiveness of various therapeutic programs and many others. Thus, these data present a picture of the movement of the mental hospital population indicating the relative size of the problem in each state, but do not provide a comparison of the relative effectiveness of mental hospital programs.

# PER PATIENT MAINTENANCE EXPENDITURES IN ALL PUBLIC HOSPITALS FOR THE CARE OF THE MENTALLY ILL, 1956 AND 1957



PER PATIENT MAINTENANCE EXPENDITURE, ( IN DOLLARS ) GPO 9 42 430

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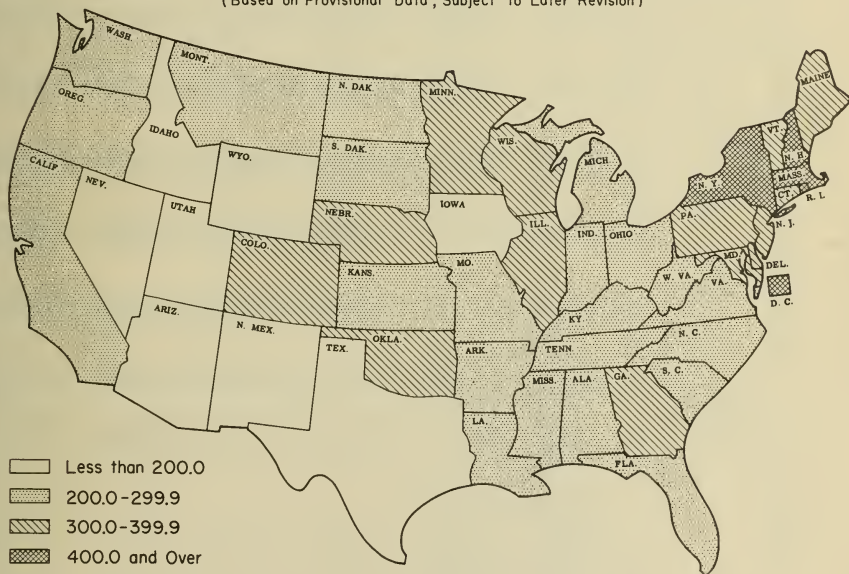
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Series MHB-H-3

(Based on Provisional Data, Subject to Later Revision)



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TABLE 1

PROVISIONAL MOVEMENT AND ADMINISTRATIVE DATA FOR PUBLIC MENTAL HOSPITALS: UNITED STATES AND EACH STATE, FISCAL YEAR 1957<sup>1</sup>  
(Statistics based on data from the 277 Public Mental Hospitals)

State	All admissions excluding transfers		First admis- sions	Readmis- sions	Dis- charges	Deaths in hospital	Resident patients at end of year		Average daily resident patient population		Total full-time employees at end of year	Maintenance expenditures	
	Number	Rate <sup>2</sup>					Number	Rate <sup>2</sup>	Number	Rate <sup>2</sup>		Total	Per patient <sup>3</sup>
United States-----	194,497	115.5	129,278	65,219	145,116	46,848	54,826	325.8	549,330	326.3	162,753	\$731,875,452	\$1,332.31
Prolonged care <sup>4</sup> -----	190,010	112.9	126,088	63,922	141,060	46,725	54,745	325.6	548,228	325.6	160,243	722,982,357	1,318.76
Alabama-----	2,510	80.0	1,698	812	1,907	496	7,324	233.5	7,331	233.8	1,364	5,527,419	753.98
Arizona-----	825	78.3	696	129	629	161	1,595	151.5	1,624	154.2	526	2,340,116	1,440.95
Arkansas-----	2,183	124.2	1,310	873	1,943	399	4,907	279.3	4,888	278.0	1,458	4,879,913	998.35
California-----	18,639	137.5	12,394	6,245	15,580	2,586	37,106	273.8	36,586	270.2	10,666	58,290,789	1,593.25
Prolonged care <sup>4</sup> -----	18,466	136.3	12,279	6,187	15,397	2,583	37,027	273.2	36,512	269.4	10,459	57,384,503	1,571.66
Colorado-----	1,723	106.1	1,384	389	1,364	559	5,720	352.8	5,694	350.6	2,072	8,880,178	1,559.57
Prolonged care <sup>4</sup> -----	1,695	61.3	800	195	650	556	5,649	346.3	5,624	346.3	1,914	8,170,250	1,452.74
Connecticut-----	4,257	200.6	2,776	1,781	3,192	1,028	8,668	384.0	8,668	384.0	3,390	16,762,798	1,935.87
Delaware-----	1,874	124.8	1,284	285	1,364	388	5,722	422.1	5,722	422.1	716	2,695,423	1,350.69
Prolonged care <sup>4</sup> -----	1,856	124.8	1,284	285	1,364	388	5,722	422.1	5,722	422.1	716	2,695,423	1,350.69
District of Columbia-----	1,613	202.1	1,095	578	1,012	439	7,118	892.0	6,994	876.4	2,741	14,683,389	2,099.45
Florida-----	2,050	49.9	1,676	374	1,214	572	8,278	201.4	8,217	199.9	2,292	7,814,599	951.03
Georgia-----	3,519	95.3	2,579	940	2,634	964	11,852	321.1	11,828	320.5	2,083	10,106,034	854.42
Iaho-----	1,086	169.7	672	414	1,029	173	1,100	171.9	1,137	177.7	381	1,547,509	1,361.05
Illinois-----	15,099	156.5	8,336	6,763	11,687	3,693	36,879	382.3	37,031	383.9	9,261	42,136,699	1,137.88
Indiana-----	3,864	85.9	2,625	1,239	2,957	831	10,955	243.5	10,929	242.9	3,932	16,194,626	1,481.80
Prolonged care <sup>4</sup> -----	3,612	80.3	2,426	1,186	2,742	849	10,854	241.3	10,832	240.8	3,385	14,728,772	1,359.75
Iowa-----	2,849	102.4	1,534	1,315	2,403	419	5,038	181.2	5,028	180.8	1,949	6,933,097	1,378.90
Prolonged care <sup>4</sup> -----	2,559	92.0	1,286	1,273	2,117	419	5,003	179.9	4,980	179.1	1,840	6,540,529	1,313.36
Kansas-----	1,704	82.8	1,168	536	1,650	264	4,372	212.4	4,375	212.6	2,266	8,728,059	1,994.98
Kentucky-----	3,082	102.6	1,634	1,448	2,252	668	7,341	244.5	7,259	241.7	2,087	7,073,199	974.40
Louisiana-----	3,071	101.6	2,070	1,001	2,399	484	8,274	273.8	8,243	272.8	2,317	7,225,431	976.55
Maine-----	828	89.7	565	263	567	211	2,962	320.9	2,953	319.9	904	3,564,427	1,207.05
Maryland <sup>2</sup> -----	4,385	154.9	3,082	1,303	3,539	861	9,311	329.0	9,317	326.3	2,983	13,995,321	1,470.56
Massachusetts-----	8,294	175.8	5,266	3,028	6,186	2,172	22,332	463.7	22,246	463.8	7,251	34,300,325	1,456.06
Prolonged care <sup>4</sup> -----	7,688	161.0	5,722	2,996	6,184	2,169	21,964	460.0	21,869	459.2	7,211	33,326,795	1,506.91
Michigan-----	5,611	73.0	3,782	1,829	3,088	883	11,927	283.1	12,839	284.0	6,997	38,978,947	1,736.83
Prolonged care <sup>4</sup> -----	5,388	70.1	3,615	1,773	3,088	848	11,863	284.3	12,775	283.1	6,756	37,819,372	1,736.83
Minnesota-----	4,600	138.9	2,408	2,192	3,548	1,185	11,173	337.3	11,304	341.3	2,943	12,889,033	1,140.22
Mississippi-----	2,915	135.6	1,897	1,018	2,475	349	5,226	243.1	5,275	245.3	1,452	3,778,298	716.27
Missouri-----	1,905	45.2	1,390	515	1,384	672	11,655	276.8	11,680	277.4	3,705	13,839,122	1,184.86
Montana-----	919	138.0	642	277	1,020	192	1,762	264.6	1,818	273.0	467	2,148,438	1,181.76
Nebraska-----	1,860	130.6	957	903	1,853	376	4,586	322.1	4,674	323.2	2,074	7,692,747	1,692.86
Prolonged care <sup>4</sup> -----	1,486	104.4	726	760	1,548	371	4,515	317.1	4,602	323.2	1,831	6,832,634	1,484.71
Nevada-----	265	104.7	213	52	199	35	477	188.5	455	179.8	105	625,514	1,374.76
Prolonged care <sup>4</sup> -----	265	104.7	213	52	199	35	477	188.5	455	179.8	105	625,514	1,374.76
New Hampshire-----	975	172.3	695	280	767	256	2,586	456.9	2,623	463.4	880	3,707,790	1,415.37



See Page 2

New Jersey-----	8,124	145.8	5,724	2,400	5,085	2,504	21,910	393.2	21,743	390.2	7,750	34,478,272	1,585.72
New Mexico-----	516	65.4	354	162	452	82	953	120.8	958	121.4	422	1,578,356	1,647.55
New York-----	22,713	141.1	16,551	6,162	13,067	8,636	95,814	595.2	95,968	596.1	28,030	136,964,411	1,427.19
Prolonged care <sup>4</sup> -----	22,253	138.2	16,265	5,988	12,604	8,634	95,766	594.9	95,914	595.8	27,943	136,597,927	1,423.75
North Carolina <sup>2</sup> -----	4,274	97.4	2,955	1,319	3,538	630	9,669	220.4	9,726	221.6	3,013	11,344,741	1,166.43
North Dakota-----	977	131.7	649	328	750	141	1,844	281.7	1,848	287.0	524	2,178,880	1,179.05
Ohio-----	11,205	122.0	7,641	3,564	9,176	2,227	27,770	302.3	27,902	303.7	7,912	36,249,989	1,299.19
Oklahoma-----	2,218	99.9	1,328	890	1,827	518	7,612	342.7	7,663	345.0	2,107	7,002,769	913.84
Oregon-----	3,046	175.2	2,053	993	2,178	502	5,044	290.1	5,044	290.1	1,457	5,544,179	1,099.16
Pennsylvania <sup>2</sup> -----	8,019	73.0	5,438	2,581	4,383	3,047	39,234	357.0	39,662	360.9	12,645	55,237,273	1,392.70
Prolonged care <sup>4</sup> -----	7,732	70.4	5,269	2,463	4,279	3,045	39,095	355.7	39,589	360.2	12,203	54,726,763	1,382.37
Rhode Island-----	1,620	195.7	997	623	1,123	428	3,396	410.1	3,402	410.9	1,072	4,923,257	1,447.17
South Carolina-----	2,350	101.7	1,747	603	1,818	466	6,336	274.2	6,220	269.1	1,420	5,294,858	851.26
South Dakota-----	808	117.6	532	276	660	141	1,660	241.6	1,640	238.7	462	1,559,451	950.88
Tennessee <sup>2</sup> -----	3,761	109.9	2,440	1,321	3,141	695	8,093	236.4	8,134	237.6	1,437	5,824,664	716.09
Prolonged care <sup>4</sup> -----	3,403	99.4	2,205	1,198	2,789	693	8,040	234.9	8,084	263.2	1,299	5,470,544	676.71
Texas-----	6,977	77.6	4,591	2,386	5,985	1,235	15,857	176.4	15,897	176.8	4,089	15,894,466	999.84
Utah-----	509	60.9	378	131	434	94	1,305	156.1	1,287	153.9	427	1,875,988	1,457.64
Vermont-----	529	143.8	346	183	389	154	1,241	337.2	1,248	339.1	387	1,548,469	1,240.76
Virginia-----	4,156	113.4	2,492	1,664	2,979	1,017	11,020	300.8	10,965	299.3	2,693	11,479,642	1,046.93
Washington-----	2,408	90.8	1,571	1,037	1,836	633	8,840	257.8	8,994	263.6	2,217	10,108,520	1,445.31
West Virginia-----	2,519	121.3	1,783	1,032	2,042	428	2,563	273.4	2,572	276.4	1,078	20,009,182	729.43
Wisconsin-----	5,389	124.4	3,628	1,831	2,944	1,407	12,984	338.7	13,042	339.2	3,882	20,016,820	1,133.93
Prolonged care <sup>4</sup> -----	5,262	126.5	3,644	1,818	3,737	1,407	14,984	389.2	15,004	389.2	3,882	20,016,820	1,133.93
Wyoming-----	275	88.7	170	105	217	73	616	198.7	634	198.1	165	956,525	1,557.86

1 Data obtained in 1957 census of patients in mental institutions with exceptions noted in footnote 5.

2 Rate per 100,000 estimated civilian population. Source: U. S. Bureau of the Census, Current Population Reports, Series P-25, No. 186.

3 Based on the average daily resident patient population of hospitals reporting expenditures.

4 State and county hospitals only.

5 Specific items for following hospitals obtained in 1957 special survey from states in question:

- a. One state hospital - Maryland - movement and administrative data.
- b. One state hospital - Maryland - personnel data only.
- c. One state hospital-North Carolina-movement and administrative data.
- d. One state hospital-North Carolina-personnel and financial data.
- e. One state hospital-Minnesota - financial data.
- f. One psychopathic hospital-Pennsylvania-financial data.
- g. One county hospital-Tennessee-financial data.

TABLE 2  
PROVISIONAL MOVEMENT AND ADMINISTRATIVE DATA FOR PUBLIC MENTAL HOSPITALS: UNITED STATES AND EACH STATE, FISCAL YEAR 1968<sup>a</sup>

State	All admissions excluding transfers		First admissions	Readmissions	Discharges	Deaths in hospital	Resident patients at end of year		Average daily resident patient population		Total full-time employees at end of year	Maintenance expenditures	
	Number	Rate <sup>2</sup>					Number	Rate <sup>2</sup>	Number	Rate <sup>2</sup>		Total	Per patient <sup>3</sup>
United States-----	210,117	122.6	138,612	71,505	154,945	51,391	54,546	318.2	547,368	319.3	169,259	\$81,243,068	\$1,485.51
Prolonged care <sup>4</sup> -----	205,703	120.0	135,386	70,317	150,805	51,291	54,429	317.5	546,131	318.6	166,778	803,247,863	1,470.95
Alabama-----	2,726	85.6	1,828	898	2,118	554	7,398	232.3	7,337	230.4	1,488	6,397,707	899.24
Arizona-----	1,196	107.0	809	387	1,018	185	1,608	143.8	1,403	143.4	1,547	2,480,182	1,547.21
Arkansas-----	2,653	151.7	1,782	871	1,022	384	4,986	285.1	4,925	281.6	1,504	6,056,221	1,229.69
California-----	20,540	146.5	13,703	6,837	17,272	2,891	36,835	262.6	36,556	260.1	11,795	67,744,377	1,833.17
Prolonged care <sup>4</sup> -----	20,361	145.2	13,591	6,770	17,113	2,890	36,746	262.0	36,484	260.1	11,566	66,395,082	1,819.84
Colorado-----	2,410	143.7	1,949	461	1,625	590	5,857	349.3	5,825	347.3	2,233	10,041,861	1,723.92
Prolonged care <sup>4</sup> -----	1,626	97.0	1,353	273	829	588	5,790	345.3	5,744	342.5	2,077	9,202,380	1,602.26
Connecticut-----	4,323	196.3	2,804	1,719	3,205	1,098	8,880	385.4	8,684	376.9	3,558	18,392,823	2,118.01
Delaware-----	517	131.7	395	242	671	202	1,743	390.8	1,762	395.1	770	3,033,164	1,721.43
Prolonged care <sup>4</sup> -----	517	131.7	395	242	671	202	1,743	390.8	1,762	395.1	770	3,033,164	1,721.43
District of Columbia-----	1,605	199.6	1,216	389	1,076	552	6,394	869.3	6,365	866.3	2,748	2,143,723	1,509.66
Florida-----	2,605	59.9	1,937	668	1,528	725	8,849	203.5	8,702	200.1	2,817	10,452,878	1,201.20
Georgia-----	3,740	99.8	2,855	885	2,541	1,145	11,797	314.7	11,748	313.4	2,127	11,218,535	954.99
Idaho-----	903	137.2	564	339	663	172	1,066	162.0	1,079	164.0	395	1,760,812	1,631.89
Illinois-----	14,874	151.2	8,394	6,480	11,298	4,113	36,437	370.3	36,892	375.0	9,753	49,346,371	1,337.60
Indiana-----	4,080	89.2	2,741	1,339	3,075	942	10,992	240.3	11,059	241.8	4,041	17,953,627	1,623.44
Prolonged care <sup>4</sup> -----	3,737	81.7	2,451	1,286	2,767	942	10,858	237.4	10,919	238.7	3,682	16,359,365	1,498.25
Iowa-----	3,133	111.1	1,616	1,517	2,888	513	4,831	171.3	4,967	176.1	2,003	7,760,003	1,562.31
Prolonged care <sup>4</sup> -----	2,842	100.8	1,367	1,475	2,596	513	4,789	169.8	4,914	174.3	1,898	7,293,169	1,484.16
Kansas-----	2,020	97.2	1,330	690	1,806	292	4,035	194.1	4,215	202.7	2,199	9,454,895	2,243.15
Kentucky-----	3,653	120.4	1,918	1,735	2,894	744	7,091	233.7	7,247	238.9	2,076	7,903,545	1,090.87
Louisiana-----	3,373	109.6	1,612	1,761	2,561	565	8,328	270.7	8,277	269.0	2,337	8,336,592	1,007.19
Maine-----	973	104.1	656	337	648	263	2,943	314.8	2,965	317.1	922	4,075,910	1,374.68
Maryland-----	3,872	133.6	2,633	1,239	3,051	908	9,309	321.1	9,294	320.6	3,223	15,162,625	1,631.44
Massachusetts-----	8,992	187.0	6,124	3,234	7,739	2,574	21,870	450.2	21,820	453.4	7,970	38,241,781	1,752.60
Prolonged care <sup>4</sup> -----	8,232	172.3	5,582	2,136	7,043	2,476	21,575	447.6	21,803	450.9	7,738	37,102,286	1,709.35
Michigan-----	5,690	72.5	3,755	1,939	3,748	1,555	21,911	270.1	22,462	280.8	7,738	31,401,660	1,864.70
Prolonged care <sup>4</sup> -----	5,394	68.7	3,545	1,823	3,469	1,553	21,843	268.4	22,462	280.8	7,738	31,401,660	1,864.70
Minnesota-----	4,754	144.1	2,531	2,223	3,150	1,214	11,068	378.1	11,149	380.8	5,967	11,805,378	1,805.77
Mississippi-----	3,120	143.8	2,021	1,099	2,560	359	5,158	237.8	5,195	239.5	1,423	4,010,043	771.90
Missouri-----	2,079	36.1	1,724	605	1,904	707	11,625	274.1	11,645	274.6	3,947	14,948,505	1,283.68
Montana-----	1,019	149.4	713	306	861	211	1,730	253.7	1,790	256.6	532	2,337,400	1,335.44
Nebraska-----	2,046	141.7	1,115	931	1,736	447	4,429	306.0	4,517	312.8	2,079	7,568,616	1,675.58
Prolonged care <sup>4</sup> -----	1,713	118.6	902	811	1,435	444	4,240	300.6	4,434	307.1	1,861	6,767,552	1,675.29
Nevada-----	338	131.0	288	50	220	36	508	196.9	492	190.7	140	767,971	1,560.81
New Hampshire-----	1,038	179.9	727	311	752	290	2,577	446.6	2,593	449.4	890	4,289,863	1,624.40

New Jersey-----	8,503	149.3	5,833	2,670	5,825	2,660	21,827	383.1	21,863	383.8	8,201	39,466,600	1,805.18
New Mexico-----	24,023	76.3	433	190	529	76	944	115.7	949	116.3	450	1,700,000	1,791.36
New York-----	26,029	146.8	17,261	6,397	13,655	9,523	94,611	384.6	95,324	389.2	29,889	148,912,000	1,561.76
Prolonged care <sup>4</sup> -----	23,703	146.8	17,261	6,427	13,655	9,523	94,611	384.6	95,324	389.2	29,889	148,700,000	1,561.35
North Carolina-----	5,705	127.6	3,888	1,817	1,787	169	9,620	215.2	9,644	215.7	3,091	13,974,011	1,448.98
North Dakota-----	1,235	190.3	826	469	1,105	161	1,721	265.2	1,787	275.3	520	2,273,409	1,272.19
Ohio-----	12,219	131.1	8,275	3,944	9,966	2,407	27,995	300.3	27,910	299.4	8,209	42,914,302	1,537.60
Oklahoma-----	2,547	113.2	1,548	999	1,990	629	7,376	327.8	7,524	334.4	2,509	7,110,973	1,491.28
Oregon-----	3,244	183.5	2,258	986	2,202	527	4,998	282.7	5,066	286.5	1,447	7,110,973	1,422.35
Pennsylvania-----	8,289	74.8	5,682	2,607	4,990	3,432	38,309	345.7	39,013	352.1	11,493	52,917,220	1,460.10
Prolonged care <sup>4</sup> -----	8,090	73.0	5,571	2,519	4,824	3,432	38,208	344.8	38,907	351.1	11,088	52,917,220	1,460.10
Rhode Island-----	1,632	194.1	996	636	1,098	418	3,422	406.9	3,409	405.4	1,072	5,390,000	1,569.38
South Carolina-----	2,481	105.8	1,861	620	1,834	501	6,385	272.2	6,351	270.7	1,476	5,596,645	881.22
South Dakota-----	938	135.5	560	378	755	194	1,662	240.2	1,668	241.0	555	2,227,886	1,335.66
Tennessee-----	4,286	124.2	2,484	1,802	3,419	701	8,379	242.8	8,145	236.0	1,678	7,284,258	894.32
Prolonged care <sup>4</sup> -----	3,942	114.2	2,255	1,687	3,070	701	8,331	241.4	8,096	234.6	1,539	6,888,159	850.81
Texas-----	8,206	89.1	5,449	2,757	7,265	1,224	16,162	175.6	15,990	173.7	4,415	17,943,295	1,122.16
Utah-----	469	56.8	373	116	373	138	1,296	150.5	1,325	153.9	410	1,668,701	1,259.40
Vermont-----	565	152.7	369	196	429	186	1,180	318.9	1,218	329.2	416	2,065,099	1,695.48
Virginia-----	4,627	122.3	2,793	1,824	3,257	1,866	11,067	292.6	11,027	291.6	2,749	12,409,450	1,125.37
Washington-----	2,488	91.9	1,455	1,033	1,886	517	5,971	252.9	6,046	253.0	2,617	10,689,453	1,161.42
West Virginia-----	2,670	135.7	1,796	874	1,726	322	5,437	279.3	5,422	278.5	1,167	4,599,598	851.46
Wisconsin-----	5,832	148.3	3,583	2,249	4,142	1,677	14,930	379.7	14,975	380.5	3,369	22,181,900	1,483.34
Prolonged care <sup>4</sup> -----	5,571	141.7	3,332	2,239	3,892	1,677	14,891	378.7	14,918	379.4	3,369	21,116,011	1,455.69
Wyoming-----	359	113.6	212	147	252	81	638	198.7	623	197.2	197	845,655	1,154.11

<sup>1</sup> Data obtained in 1958 special survey of public mental hospitals.

<sup>2</sup> Rate per 100,000 estimated civilian population. Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 189.

<sup>3</sup> Total maintenance expenditures divided by the average daily resident patient population.

<sup>4</sup> Prolonged care hospitals comprise the state and county mental hospitals only. Public hospitals in addition include psychopathic hospitals.

<sup>5</sup> Data on personnel and expenditures for one state hospital not available. Therefore, per patient expenditures are based on data for remaining hospitals.

<sup>6</sup> Data on expenditures for the psychopathic hospital not available. Therefore, the per patient expenditures are based on data for the state hospitals only.

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The 1957 movement and administrative data for the nation's 277 public mental hospitals were obtained, for the most part, from schedules submitted for the annual census of mental patients. The exceptions to this are indicated on footnote 5 of Table 1. A special survey of these public mental hospitals supplied similar data for 1958. All of the data shown in Tables 1 and 2 are provisional and are subject to change prior to their publication in the annual report, *Patients in Mental Institutions*.

The public mental hospitals represented by this report include 265 prolonged care hospitals (state and county hospitals) and 12 psychopathic hospitals. The latter are primarily short term, intensive treatment or teaching facilities.

Between 1957 and 1958 the resident patient population of these hospitals declined by 3,161 patients. This represents a decrease of 0.6% which is similar to that experienced between 1956 and 1957 (see Table 3). This is the third consecutive year in which a decline in the resident population of these hospitals has occurred. The greatest decrease, 1.4%, took place between 1955 and 1956. Between year-end 1957 and 1958 twenty-eight states experienced a decline in their resident patient population as compared with twenty-nine states between 1956 and 1957.

Table 3 indicates that the percent increase in admissions was greater between 1957 and 1958 than between 1956 and 1957, while the percent increase in discharges was smaller. The number of deaths showed a considerable increase during the latter period (9.7%) as compared to a decrease (2.9%) between 1956 and 1957. Thus, it appears that, although the rate of decline in the year-end resident patient population of the public mental hospitals was approximately the same for both periods, the movement patterns responsible for the decline were different for each period.

There were 545,465 patients resident in public mental hospitals in the United States at the end of 1958, a rate of 318.2 per 100,000 civilian population which is a decrease of 2.4% from the 1957 year-end rate of 325.8. The resident patient rate at the end of each year showed a considerable variation among states. For example, in 1958 the rate ranged from a low of 115.7 in New Mexico to a high of 584.6 in New York. A similar range of rates prevailed in 1957 (120.8 in New Mexico to 595.2 in New York). The District of Columbia has been excluded from consideration here since a substantial proportion of patients admitted to and resident in its one public mental hospital are nonresidents of the District.

The geographic distribution of the 1958 average daily resident patient rates is shown on the map. These rates which differ only slightly from the year-end resident patient rates are generally highest in the northeastern and east central states and lower in the south central and west central states.

The 210,117 admissions to the public mental hospitals in the United States in 1958 represent an admission rate of 122.6 per 100,000 civilian population, an increase of 6.1% over the 1957 rate of 115.5. As was true for resident patient rates, admission rates also varied considerably among states during each year. In 1958 this rate ranged from a low of 56.1 in Missouri to a high of 196.3 in Connecticut as compared to a range of 45.2 in Missouri to 221.8 in Delaware during 1957. The District of Columbia has again been excluded for the reason cited above.

Despite the continued slight decrease in year-end resident patient population in public mental hospitals in the United States the number of full time employees has been increasing. The rate of this increase, however, appears to have dropped slightly from 5.9% in 1956-57 to 4% in 1957-58. Forty states and the District of Columbia had increases in the number of full-time personnel in 1958.

The per patient expenditures for maintenance in public mental hospitals in the United States exhibited the same rate of increase (11.5%) between 1957-58 as between 1956-57. In 1958 there was a considerable variation among states in per patient expenditures, ranging from a low of \$771.90 in Mississippi to a high of \$2254.16 in the District of Columbia.

Any interpretation of differences noted among states in Tables 1 and 2 with respect to movement, personnel or expenditure data, should be made with caution. Some partial explanation of the differences will be provided at a later time by data which will give breakdowns of admissions and resident patients by age, sex, and diagnosis and which will furnish detailed administrative data such as types of personnel employed and kinds of expenditures made. Other additional factors, however, must be taken into account to fully explain the observed interstate differences. Information on such items as policies and laws effecting admission and release of patients, extent of other community facilities for the treatment of the mentally ill, and extent and effectiveness of therapeutic programs, etc. are all necessary for a fuller understanding of these interstate variations.



TABLE 3

## MOVEMENT OF PATIENT POPULATION IN PUBLIC MENTAL HOSPITALS; UNITED STATES 1956-1958

ITEM	1956 <sup>1</sup>	1957 <sup>2</sup>	1958 <sup>2</sup>	Percent change	
				1956-1957	1957-1958
All admissions-----	185,597	194,497	210,117	4.8	8.0
First admissions-----	125,539	129,278	138,612	3.0	7.2
Readmissions-----	60,058	65,219	71,505	8.6	9.6
Discharges-----	133,208	145,116	154,945	8.9	6.8
Deaths in hospital-----	48,236	46,848	51,391	-2.9	9.7
Resident patients at end of year-----	551,390	548,626	545,465	-0.5	-0.6
Personnel employed full time at end of year-----	153,715	162,753	169,259	5.9	4.0
Maintenance expenditures					
Total-----	663,280,934.00	731,875,462.00	812,836,068.00	10.3	11.1
Per patient-----	1,194.88	1,332.31	1,485.51	11.5	11.5

<sup>1</sup> Based on provisional data. Subject to revision prior to final publication.

DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE  
NATIONAL INSTITUTES OF HEALTH  
BETHESDA 14, MARYLAND

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# MENTAL HEALTH STATISTICS

## Current Reports

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

January 1960

Bethesda 14, Maryland

Series MHB-H-4

PROVISIONAL DATA ON  
PATIENTS IN PUBLIC HOSPITALS FOR THE CARE OF THE MENTALLY ILL  
1958 and 1959

NUMBER OF RESIDENT PATIENTS, TOTAL ADMISSIONS, NET  
RELEASES, AND DEATHS, PUBLIC MENTAL HOSPITALS,  
UNITED STATES, 1939-'59

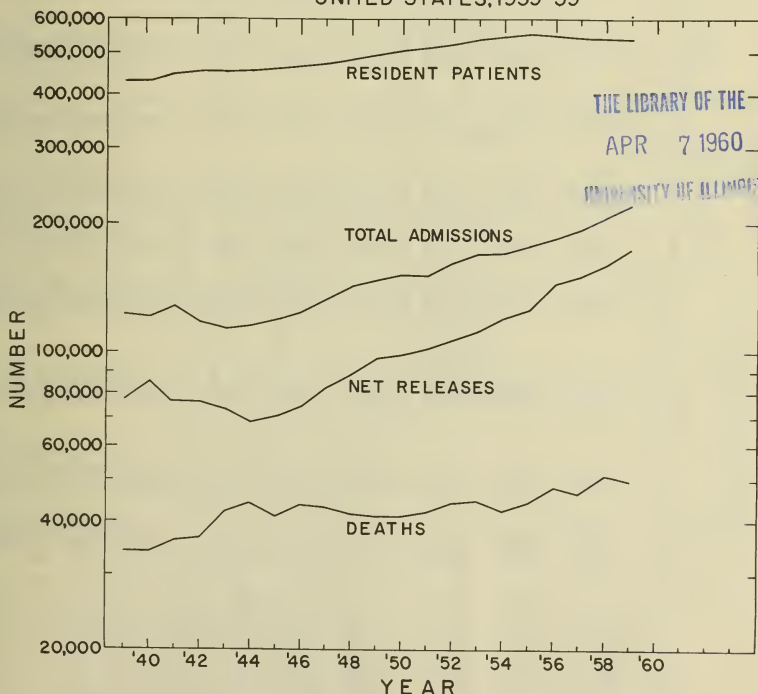


TABLE 1

PROVISIONAL PATIENT MOVEMENT, PERSONNEL, AND FINANCIAL DATA BY STATE: UNITED STATES, 1958<sup>1</sup>  
TOTAL PUBLIC MENTAL HOSPITALS<sup>2</sup>

PATIENT MOVEMENT DATA															PERSONNEL AND FINANCIAL DATA				
State	Admissions (excluding transfers)					Net Releases <sup>4</sup>					Deaths In Hospital	Resident Patients End of Year	Average Daily Patient Population			Total Personnel at End of Year	Maintenance Expenditures		
	Total		First Admissions	Re- admissions	Number	Rate	Number	Rate	Number	Rate <sup>3</sup>			Per Resident Under Treatment <sup>6</sup>	Total Amount	Per Resident Under Treatment <sup>5</sup>		Per Patient Under Treatment <sup>6</sup>		
	Number	Rate <sup>3</sup>																	
United States—	209,503	122.2	137,061	72,442	161,972	296.5	51,294	544,863	546,337	318.7	169,438	\$805,861,786	\$1,475.26	\$1,003.38					
Alabama—	2,726	85.6	1,828	898	2,098	285.9	554	7,398	7,337	230.4	1,539	6,597,708	899.24	656.49					
Alaska—	958	85.7	774	184	761	474.7	184	1,608	1,603	143.4	1,548	2,480,182	1,547.21	971.48					
Arizona—	2,653	151.7	1,638	1,015	2,150	444.7	384	4,986	4,925	281.6	1,479	5,845,616	1,886.93	773.23					
Arkansas—	2,047	110.2	1,376	671	1,122	132.6	2,411	5,866	5,825	317.3	2,089	18,111,857	1,702.31	1,308.32					
California—	23,848	110.2	15,426	8,422	17,775	444.1	2,411	36,767	36,767	317.7	2,089	9,918,993	1,702.31	1,308.32					
Connecticut—	4,523	196.3	2,804	1,719	3,267	376.2	1,098	8,880	8,684	376.9	3,835	18,004,008	2,073.24	1,359.31					
Delaware—	1,657	135.6	1,095	562	1,202	172.0	427	6,994	6,965	86.3	2,762	10,580,703	1,584.52	1,000.46					
District of Columbia—	1,605	199.6	985	620	1,202	172.6	527	8,994	8,702	200.1	7,787	15,700,201	2,254.16	1,739.86					
Florida—	2,605	99.8	1,936	669	1,331	150.7	723	8,849	8,702	200.1	7,787	10,698,923	1,288.33	1,799.46					
Georgia—	3,740	99.8	2,855	885	2,650	225.6	1,145	11,797	11,748	313.4	2,157	10,559,668	897.06	675.90					
Idaho—	903	137.2	564	339	765	709.0	172	1,066	1,079	164.0	418	1,760,812	1,631.89	879.09					
Illinois—	14,874	151.2	9,480	5,400	11,203	303.7	4,113	36,437	36,892	375.0	9,733	49,346,971	1,337.50	935.50					
Indiana—	4,079	85.2	2,741	1,338	3,101	280.4	942	10,991	10,942	317.0	4,988	17,955,635	1,653.44	1,194.20					
Iowa—	2,126	111.4	1,416	710	1,584	145.9	404	4,934	4,930	171.0	2,159	10,580,703	1,584.52	1,000.46					
Kansas—	2,020	97.2	1,330	690	2,065	469.9	282	4,035	4,215	202.7	2,159	9,454,886	2,263.15	1,479.18					
Kentucky—	3,653	120.4	1,918	1,735	3,159	435.9	744	7,091	7,247	238.9	2,076	7,807,486	1,035.62	715.62					
Louisiana—	3,340	108.7	1,636	1,732	2,767	334.3	552	8,239	8,277	299.0	2,337	8,111,076	979.16	698.15					
Maine—	969	105.6	631	333	725	244.5	263	2,943	2,965	317.1	3,194	4,075,987	1,373.69	1,035.12					
Maryland—	4,532	156.3	2,988	1,544	3,624	390.0	910	9,309	9,292	320.5	3,198	15,102,001	1,623.33	1,090.99					
Massachusetts—	9,299	193.2	6,665	2,634	7,464	342.1	2,257	21,670	21,850	453.4	8,023	39,004,182	1,743.55	1,211.91					
Michigan—	5,711	72.8	3,689	2,022	4,168	193.2	1,555	21,915	21,568	274.8	6,711	41,170,117	1,908.85	1,489.62					
Minnesota—	4,734	141.1	2,331	1,223	1,609	326.9	1,214	11,048	11,149	330.8	2,967	15,467,798	1,399.94	972.41					
Mississippi—	3,113	142.5	2,015	1,098	2,822	532.2	399	5,158	5,195	237.5	1,461	10,580,703	1,584.52	1,000.46					
Missouri—	2,379	85.1	1,724	955	1,709	116.8	707	11,618	11,645	274.6	3,875	15,240,008	1,368.72	1,085.93					
Montana—	1,019	145.4	713	306	880	480.0	211	1,730	1,750	256.6	518	1,335,466	1,335.46	840.49					
Nebraska—	2,046	141.7	1,315	931	1,766	391.0	447	4,419	4,517	312.8	2,087	7,568,616	1,675.58	1,111.23					
Nevada—	338	175.9	228	50	271	550.8	36	568	568	190.7	139	767,918	1,600.81	942.23					
New Hampshire—	1,038	175.9	727	311	777	291.9	290	2,577	2,593	44.4	927	4,255,087	1,640.92	1,174.16					
New Jersey—	8,501	146.2	5,805	2,696	5,876	268.8	76	21,828	21,861	383.7	8,318	37,155,298	1,699.62	1,221.77					
New Mexico—	623	76.3	433	190	556	595.9	94	944	949	118.3	435	1,644,311	1,752.68	1,043.34					
New York—	24,080	148.8	17,483	6,599	15,759	165.3	9,324	94,611	95,349	589.2	29,942	147,743,115	1,549.50	1,232.28					
North Carolina—	1,255	130.3	825	430	1,310	650.7	161	1,782	1,787	275.3	543	10,580,703	1,584.52	1,000.46					
North Dakota—	1,717	111.2	1,095	623	1,310	286.3	269	7,376	7,524	314.4	2,308	10,580,703	1,584.52	1,000.46					
Ohio—	2,547	181.5	1,548	999	2,154	386.3	623	7,376	7,524	314.4	2,308	10,580,703	1,584.52	1,000.46					
Oklahoma—	2,547	181.5	1,548	999	2,154	386.3	623	7,376	7,524	314.4	2,308	10,580,703	1,584.52	1,000.46					
Oregon—	3,244	183.5	2,258	986	2,765	515.8	527	4,996	5,066	286.5	1,506	5,548,483	1,608.35	1,150.58					
Pennsylvania—	8,287	74.8	5,258	2,600	5,780	118.1	3,432	38,309	39,015	352.1	11,851	74,916,984	1,408.55	1,156.26					
Rhode Island—	1,632	130.1	996	636	1,188	298.9	227	4,976	5,069	286.5	1,156	5,548,483	1,608.35	1,150.58					
South Carolina—	2,481	104.8	1,842	639	1,898	298.9	501	6,448	6,343	270.7	1,476	5,596,465	1,627.70	1,105.58					
South Dakota—	938	133.5	560	378	742	444.8	194	1,662	1,658	241.0	512	1,974,175	1,413.56	799.38					
Tennessee—	4,286	126.2	2,484	1,802	3,479	427.1	701	8,199	8,145	236.0	1,675	7,284,258	894.32	581.44					
Texas—	8,156	89.0	5,451	2,745	6,570	417.4	1,221	16,152	15,953	173.0	4,306	18,779,612	1,477.32	788.44					
Utah—	1,996	69.2	1,141	852	1,562	336.7	419	1,235	1,238	39.5	439	10,580,703	1,584.52	1,000.46					
Vermont—	566	156.7	369	186	440	361.2	186	1,180	1,218	325.2	416	2,068,107	1,584.52	1,000.46					
Virginia—	4,696	124.2	2,857	1,839	3,561	323.1	1,088	11,067	11,023	394.5	2,761	12,408,112	1,125.66	789.52					
Washington—	2,688	91.9	1,455	1,033	1,895	276.8	62	6,871	6,846	250.0	2,284	10,699,153	1,541.42	1,155.95					
Washington, D.C.—	2,678	135.1	1,693	975	2,073	267.9	253	5,617	5,600	380.2	1,130	23,018,182	1,539.57	1,102.56					
West Virginia—	1,519	113.6	911	608	1,216	427.0	1,698	11,923	11,931	340.2	4,077	23,018,182	1,539.57	1,102.56					
Wyoming—	359	113.6	212	147	226	287.0	91	628	623	177.2	204	1,063,295	1,674.65	1,070.05					



PUBLIC MENTAL HOSPITALS EXCLUDING PSYCHOPATHIC HOSPITALS<sup>1</sup>

United States-----	205,399	134,043	71,351	157,603	288.9	51,283	544,080	543,450	313.2	1,871,176	\$795,492,428	\$1,458.62	\$1,056.58
California-----	20,368	145.2	7,013	17,835	490.7	2,280	36,680	36,347	252.2	11,546	1,792.77	1,135.32	1,135.32
Colorado-----	1,064	63.4	234	236	56.8	98	5,779	5,764	344.5	1,923	9,080.52	1,530.47	1,530.48
Delaware-----	2,000	10.1	1,000	1,000	10.1	514	4,870	4,824	171.6	1,890	7,307.68	1,443.45	1,443.45
Illinois-----	2,493	101.1	1,474	2,540	515.3	514	4,830	4,924	171.6	1,890	7,307.68	1,443.45	1,443.45
Massachusetts-----	8,592	178.5	6,156	6,755	311.2	2,256	21,545	21,703	450.9	7,761	36,904.87	1,702.04	1,207.77
Michigan-----	1,713	113.6	811	1,442	295.7	444	4,340	4,434	307.1	1,969	6,707.52	1,284.29	1,086.43
New York-----	23,723	116.6	6,477	15,415	161.8	9,123	94,551	92,299	598.8	29,894	147,523,836	1,540.01	1,234.62
Pennsylvania-----	8,098	79.0	3,532	5,513	312.5	3,123	78,208	78,999	375.1	11,430	52,943,098	1,340.69	1,122.08
Tennessee-----	3,942	114.2	2,255	3,130	386.6	701	8,131	8,096	231.6	1,536	6,888.19	1,890.81	1,574.88
Wisconsin-----	5,590	112.2	3,325	3,982	267.0	1,698	14,914	14,915	379.3	3,990	22,566,664	1,513.02	1,096.85

<sup>1</sup> These data were taken from the 1958 census of patients in mental institutions. Exceptions are shown in footnotes 7-10.

<sup>2</sup> Public mental hospitals include the state, county and psychopathic hospitals.

<sup>3</sup> Admission and average daily resident patient rates are per 100,000 estimated civilian population. Source: U.S. Bureau of the Census, *Current Population Reports*, Series P-23, No. 189.

<sup>4</sup> Net releases are defined as the net number of patients released to the community in any one year. Net release rates are per 1,000 average daily resident patient population.

<sup>5</sup> Per resident patient maintenance expenditures are based on the average daily resident patient population of hospitals reporting expenditures.

<sup>6</sup> Per patient under treatment maintenance expenditures are based on the sum of resident patients at beginning of year plus all admissions (excluding transfers).

<sup>12</sup> Data for the Governor Bacon Health Center are not included in the data for Delaware. However, to make data for Delaware comparable with those of other States, the data for the Governor Bacon Health Center are classified as a psychopathic hospital.) should be included. Totals for Delaware, including this facility, are as follows:

Total Admissions (excluding transfers)	837	Average Daily Resident	1,768
Admissions	837	Per Patient	1,768
Discharges	216	Maintenance Expenditures	\$3,023.154
Net Releases	621	Maintenance Expenditures	\$3,023.154
Deaths in Hospital	202	per Resident Patient	\$1,721.43
Resident Patients at End of Year	1,743	per Patient Under Treatment	\$1,189.48

<sup>7</sup> Maryland: 1958 Special Survey data were used as estimates for one state hospital.

<sup>8</sup> Minnesota: the maintenance expenditures were not available for one state hospital. The number of average daily resident patients for this hospital were excluded from the denominator in computing expenditures per resident patient. However, it was not possible to exclude the patients for this hospital from the denominator of the expenditure per patient under treatment ratio.

<sup>9</sup> Oklahoma: 1958 Special Survey data were used as estimates for all Oklahoma public mental hospitals.

<sup>10</sup> Tennessee: 1958 Special Survey figures for expenditures was used as an estimate for one county hospital.

<sup>11</sup> This section of the table includes only states which have psychopathic hospitals.

TABLE 2

PROVISIONAL PATIENT MOVEMENT, PERSONNEL, AND FINANCIAL DATA BY STATE: UNITED STATES, 1959<sup>1</sup>TOTAL PUBLIC MENTAL HOSPITALS<sup>2</sup>

PERSONNEL AND FINANCIAL DATA																	
State	PATIENT MOVEMENT DATA										Maintenance Expenditures						
	Admissions (excluding transfers)					Net Releases <sup>4</sup>					Total Full-time Personnel at End of Year	Maintenance Expenditures					
	Total		Rate <sup>3</sup>	First Admissions	Re- admissions	Number		Rate	Deaths in Hospital	Residents End of Year		Average Daily Resident Population	Number	Rate <sup>3</sup>	Total Amount	Per Resident Patient <sup>5</sup>	Per Patient Under Treatment <sup>6</sup>
	Number																
United States-----	223,225	128.0		142,881	80,344	175,727	324.4		49,640	542,721	541,717	310.7		\$854,354,593	\$1,577.54	\$1,112.31	
Alabama-----	2,855	90.1		1,917	938	2,337	317.1		136	7,400	7,371	232.7		7,007,049	956.05	1,687.32	
Alaska-----	1,061	87.5		789	272	806	496.9		193	1,620	1,620	133.8		2,677,139	1,650.52	1,003.05	
Arizona-----	2,934	170.5		1,728	1,206	2,388	322.7		604	7,470	7,470	285.7		11,515,526	1,566.35	1,222.56	
Arkansas-----	2,318	147.1		1,088	735	1,877	482.5		2,864	37,274	36,301	233.6		71,452,979	1,964.35	1,224.51	
California-----	2,642	159.7		2,102	540	1,922	319.7		2,643	5,943	6,012	363.5		10,655,335	1,772.31	1,252.37	
Colorado-----	4,731	196.8		2,659	2,072	3,451	457.9		1,048	8,602	8,608	348.9		19,164,102	2,221.18	1,608.00	
Connecticut-----	1,631	134.5		1,258	379	1,635	319.0		115	11,474	11,461	327.6		2,305,108	1,577.76	1,121.71	
District of Columbia <sup>7</sup> -----	2,883	61.7		2,009	874	1,957	217.8		611	6,980	6,899	636.2		17,226,442	2,496.92	2,002.42	
Florida-----	3,610	101.1		2,757	1,055	2,811	236.3		874	11,922	11,897	315.8		10,989,535	1,493.75	704.15	
Georgia-----	842	127.8		559	283	786	763.8		182	970	1,029	156.1		1,741,203	1,692.13	912.38	
Idaho-----	14,564	113.4		7,955	6,609	11,330	313.5		3,536	35,835	35,832	238.3		318,455,371	1,470.17	1,002.05	
Illinois-----	4,317	93.2		2,892	1,425	3,369	275.7		319	4,490	4,506	150.5		8,535,355	1,894.18	1,021.97	
Indiana-----	2,127	101.1		1,318	769	1,415	205.7		314	3,798	3,937	187.1		9,708,663	2,466.01	1,575.57	
Iowa-----	2,067	135.0		1,485	582	2,050	320.7		666	6,914	6,932	225.7		8,930,668	1,294.41	893.38	
Kentucky-----	4,067	132.0		2,037	2,050	3,898	571.5		445	8,548	8,425	268.1		8,765,941	1,040.42	720.16	
Louisiana-----	1,037	111.3		758	279.9	1,258	257.9		302	2,920	2,939	315.3		4,294,380	1,651.04	1,079.04	
Maine-----	4,689	174.8		2,895	1,794	4,229	465.3		894	8,875	9,089	305.9		15,700,337	1,727.38	1,121.60	
Maryland <sup>8</sup> -----	10,140	206.8		7,082	3,058	7,342	342.1		2,688	22,200	21,484	437.7		40,162,127	1,870.53	1,421.65	
Massachusetts-----	5,698	71.7		3,756	1,942	4,445	204.9		1,065	21,762	21,696	273.0		41,125,564	1,895.54	1,489.36	
Michigan <sup>9</sup> -----	4,774	140.5		2,520	2,254	4,063	371.1		1,131	10,648	10,925	321.9		16,157,722	1,498.72	1,013.93	
Minnesota-----	3,268	148.3		2,049	1,219	2,880	361.3		716	11,748	11,887	272.7		15,346,514	1,423.04	1,110.46	
Mississippi-----	2,008	138.0		1,359	649	1,865	277.5		207	1,673	1,701	249.8		2,340,712	1,376.08	834.18	
Missouri-----	1,076	138.0		788	288	926	344.4		207	4,228	4,125	301.3		8,112,140	1,864.39	1,233.91	
Montana-----	2,161	135.0		1,094	1,067	1,856	305.5		306	4,228	4,125	301.3		8,112,140	1,864.39	1,233.91	
Nebraska-----	1,089	187.1		775	310	777	302.4		37	3,525	3,429	139.5		9,591,149	1,624.08	980.75	
Nevada-----	9,020	153.5		5,897	3,123	6,634	306.4		2,787	21,427	21,651	368.1		4,477,379	1,734.07	1,321.33	
New Hampshire-----	704	82.4		546	58	666	65.6		94	2,427	2,451	110.1		99,100,100	1,805.57	1,387.10	
New Jersey-----	26,080	158.6		18,267	7,813	18,765	201.0		8,276	92,650	93,355	587.6		1,766,742	1,879.51	1,076.05	
New Mexico-----	6,187	135.0		4,144	2,043	5,198	337.0		846	9,727	9,679	217.4		158,768,744	1,700.70	1,315.50	
New York-----	12,407	230.2		8,100	4,307	10,252	377.7		2,867	14,598	14,598	302.2		14,598,522	1,802.11	1,382.18	
North Carolina-----	2,547	113.7		1,548	999	1,918	254.9		2,302	8,692	8,692	232.6		42,549,693	1,502.58	1,030.76	
North Dakota-----	3,583	203.6		2,235	1,348	2,017	338.5		545	7,376	7,524	335.7		8,210,773	1,071.28	827.45	
Oklahoma <sup>12</sup> -----	1,726	203.5		1,074	652	1,299	375.7		3,253	39,025	38,641	400.4		7,237,244	1,343.55	863.40	
Oregon-----	2,911	124.0		1,803	388	1,979	308.2		521	6,509	6,422	271.8		5,537,986	1,075.75	803.15	
South Carolina-----	4,472	143.2		2,731	1,741	3,968	480.7		699	8,404	8,255	212.6		5,944,626	1,375.55	980.49	
South Dakota-----	9,268	95.2		5,429	3,839	3,231	319.5		1,252	15,897	15,803	169.5		27,289,390	1,681.65	1,210.45	
Tennessee-----	2,562	135.6		1,555	1,007	1,759	254.9		331	3,419	3,395	400.4		4,537,986	1,075.75	803.15	
Texas-----	4,479	115.9		2,613	1,866	3,479	314.4		972	11,095	11,055	285.4		42,549,693	1,502.58	1,030.76	
Utah-----	2,597	81.4		1,697	894	2,180	315.9		511	6,841	6,841	216.3		7,787,313	943.37	595.79	
Vermont-----	2,563	115.2		1,550	1,013	1,857	314.2		445	5,411	5,411	275.5		19,479,748	1,604.58	1,231.30	
Virginia-----	6,331	105.5		4,146	2,185	5,131	346.2		1,807	11,896	11,651	373.8		2,110,890	1,869.97	1,224.17	
Washington-----	2,597	81.4		1,697	894	2,180	315.9		511	6,841	6,841	216.3		7,787,313	943.37	595.79	
West Virginia-----	2,563	115.2		1,550	1,013	1,857	314.2		445	5,411	5,411	275.5		19,479,748	1,604.58	1,231.30	
Wisconsin-----	6,331	105.5		4,146	2,185	5,131	346.2		1,807	11,896	11,651	373.8		2,110,890	1,869.97	1,224.17	
Wyoming-----	326	105.5		180	146	223	313.4		83	1,648	1,648	631		844,306	1,359.00	885.65	

United States-----	219,924	139,740	79,134	171,524	317.2	49,432	54,776	540,781	310.2	171,732	\$1,558.70	\$1,104.54
California-----	21,142	12,677	7,279	17,689	408.4	2,962	37,171	36,220	253.0	11,688	70,298,914	1,205.78
Colorado-----	1,850	1,111.9	1,324	1,133	191.1	642	5,874	5,930	318.5	1,961	9,651,605	1,260.81
Illinois-----	3,932	2,556	1,346	2,996	278.2	974	10,769	10,849	234.3	3,754	16,720,633	1,511.21
Iowa-----	3,255	1,959	1,090	2,976	668.2	327	4,458	4,458	158.7	1,769	8,056,131	1,804.26
Massachusetts-----	9,497	6,598	3,797	6,707	314.2	2,267	22,048	21,345	435.3	7,928	38,862,613	1,820.69
Michigan-----	5,733	3,895	1,818	4,101	189.9	1,406	21,673	21,599	271.8	6,441	39,460,455	1,856.03
Minnesota-----	5,911	3,895	1,818	4,101	189.9	1,406	21,673	21,599	271.8	6,441	39,460,455	1,856.03
New York-----	27,755	18,043	7,692	18,417	197.4	9,276	92,593	91,303	567.3	31,662	136,539,133	1,699.19
Pennsylvania-----	8,886	6,161	2,725	4,909	127.3	3,453	38,922	38,567	341.2	11,100	55,009,326	1,426.31
Tennessee-----	4,520	2,046	2,484	3,624	441.7	699	8,358	8,205	201.1	1,596	7,369,970	898.23
Wisconsin-----	6,532	3,951	2,471	4,884	327.3	1,507	14,855	14,924	372.7	4,101	25,390,000	1,701.29

1 These data were taken from the 1959 Special Survey of the public mental hospitals. Exceptions are shown in footnotes 7-12.

2 Public mental hospitals include the state, county and psychopathic hospitals.

3 Admission and average daily resident patient rates are per 100,000 estimated civilian population. Source: U.S. Bureau of the Census, Current Population Reports, Series 1-25, No. 210.

4 Net releases are defined as the net number of patients released to the community in any one year. Net release rates are per 1,000 average daily resident patient population.

5 Per resident patient maintenance expenditures are based on the average daily resident patient population of hospitals reporting expenditures.

6 Per patient under treatment maintenance expenditures are based on the sum of resident patients at beginning of year plus all admissions (excluding transfers).

7 District of Columbia: rates per 100,000 civilian population are based on residents of the District of Columbia only.

8 Iowa: 1959 expenditure figure was used as an estimate for one state hospital.

9 Maryland: 1958 expenditure, personnel, and average daily resident patient population data were used as estimates for one state hospital. Also, 1958 data on maintenance expenditures were used as estimates for one state hospital. Also, 1958 data on 1959 total admissions between these two categories.

10 Michigan: 1958 data on first and readmissions to the Michigan public mental hospitals were used as a basis for pre-rating the 1959 total admissions between these two categories.

11 Minnesota: the maintenance expenditure was not available for one state hospital. The maintenance expenditure was estimated from the denominator in computing expenditures per resident patient. However, it was not possible to exclude the patients for this hospital from the denominator of the expenditure per patient under treatment ratio.

12 Oklahoma: 1958 Special Survey data were used as estimates for all Oklahoma public mental hospitals.

13 This section of the table includes only states which have psychopathic hospitals.

14 Data for the Governor Bacon Health Center are not included in the data for Delaware. However, to make data for Delaware more comparable with those of the other States, the data for the Governor Bacon Health Center are included as a psychopathic hospital should be included. Totals for Delaware, including this facility, are as follows:

Total Admissions (excluding transfers)	964
First Admissions.....	267
Readmissions.....	697
Net Releases.....	719
Deaths in Hospital.....	205
Resident Patients at End of Year.....	1,751

Average Daily Resident Patient Population.....	1,763
Maintenance Expenditures.....	\$3,092,120
per Resident Patient.....	\$1,753.91
per Patient Under Treatment...	\$1,155.94



## SOURCE OF THE DATA

The 1958 data were taken from the annual census of patients in mental institutions. Exceptions are shown in footnotes to Table 1. The 1959 data were taken from a special survey of the public mental hospitals and exceptions are given in footnotes to Table 2.

## DEFINITIONS

**Public Mental Hospitals:** Includes state and county hospitals as well as psychopathic hospitals (short term, intensive treatment, teaching or research hospitals).

**Net Releases:** The net number of patients released to the community in any one year. This quantity is the number of placements on extramural care plus direct discharges less the number of returns from extramural care. National data on placements and returns from extramural care are not available but net releases may be determined from the usual movement data as:

$$\begin{array}{rcccl} \text{Net} & & \text{Resident} & & \text{All Admis-} & & \text{Resident} \\ \text{Releases} & = & \text{Patients} & + & \text{sions} & - & \text{Patients} \\ & & \text{Beginning} & & \text{Excluding} & - & \text{End of} \\ & & \text{of Year} & & \text{Transfers} & & \text{Hospital Year} \end{array}$$

Discharges do not necessarily affect the size of the resident patient population since many occur while patients are on extramural care. Thus, the concept of "net releases" has been used since it takes into account releases from and returns to the hospital.

**Expenditure Ratios:** The expenditure per resident patient (average daily) has been the most commonly used ratio for comparing mental hospital expenditures. Its major limitation is that it does not take turnover of patients into account. Thus, the ratio of expenditures to "patients under treatment" is also shown. The actual number of patients under treatment during the year is equal to the number of resident patients at beginning of year plus all admissions and all returns from extramural care. Since data on returns from extramural care are not available nationally, the number of patients at beginning of year plus all admissions (excluding transfers) has been used as the closest estimate of "patients under treatment".

## TRENDS

The year-end resident patient population of the public mental hospitals declined by about 2,100 patients between 1958 and 1959, a decrease of 0.4 percent. This downward trend started in 1956 with a decline of 1.3 percent

during that year and has continued consistently since that time. (See graph).

Total admissions increased by 6.7 percent between 1958 and 1959 which was nearly as great as the 7.7 percent increase between 1957 and 1958 (see Table 3). There has been a steady increase in admissions since the mid-1940's. The number of deaths has fluctuated over time. There was a 3.3 percent decrease between 1958 and 1959 while between 1957 and 1958 there was a 9.5 percent increase.

The trend in number of net releases has been upward since the mid-1940's. This trend has continued in 1959 with an increase of 8.4 percent over the number in 1958. Thus, the drop in the number of resident patients must be interpreted in terms of the combined effects of admissions, net releases and deaths.

The number of full-time personnel has been increasing, although the percentage of increase dropped from 4.1 percent between 1957 and 1958 to 2.8 percent between 1958 and 1959. Expenditures have also increased but showed a similar pattern (i.e., 10.1 percent increase in 1957-58 and 6.0 percent increase in 1958-59).

## INTERSTATE VARIATION

Tables 1 and 2 indicate that there is considerable variation among states in patient movement, personnel, and financial data. Actual numbers cannot be compared among states since they do not take into account differences in size of population. Therefore, the number of admissions and the average daily resident patient population per 100,000 civilian population are given. Similarly, the number of net releases has been converted into a rate by dividing it by the average daily resident patient population. This denominator is an estimate of the number of person-years of exposure to the "risk" of release. Both series of expenditure ratios show considerable variation among states, the expenditure per patient under treatment in 1959 ranging from \$500-600 up to \$1400-1500 (and \$2003 for the District of Columbia).

Any interpretation of interstate differences should be made with caution. More detailed breakdowns of movement categories by age, sex, and diagnosis as well as more detail on personnel and expenditures will be available in Patients in Mental Institutions (National Institute of Mental Health, U.S.P.H.S.). This detail will provide partial explanations of the gross differences noted in the above tables. In addition, other factors such as information on policies and laws affecting admission and release of patients, other community treatment facilities, effectiveness of therapeutic programs, etc. must be evaluated to determine the extent of their influence on interstate variation.



TABLE 3

PROVISIONAL DATA ON RECENT TRENDS OF PATIENT MOVEMENT, PERSONNEL, AND EXPENDITURES,  
PUBLIC MENTAL HOSPITALS: UNITED STATES, 1957-1959

ITEM	1957	1958	1959	Percent change	
				1957-1958	1958-1959
All admissions-----	194,497	209,503	223,225	7.7	6.5
First admissions-----	129,278	137,061	142,881	6.0	4.2
Readmissions-----	65,219	72,442	80,344	11.1	10.9
Net releases-----	150,413	161,972	175,727	7.7	8.5
Deaths in hospital-----	46,848	51,294	49,640	9.5	-3.2
Resident patients at end of year-----	548,626	544,863	542,721	-0.7	-0.4
Personnel (full time) at end of year-----	162,753	169,438	174,218	4.1	2.8
Maintenance expenditures-----	\$731,875,462	\$805,861,786	\$854,354,503	10.1	6.0
Per resident patient-----	1,332.31	1,475.26	1,577.54	10.7	6.9
Per patient under treatment----	981.21	1,063.38	1,112.31	8.4	4.6

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# MENTAL HEALTH STATISTICS

## Current Reports

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

January 1961

Bethesda 14, Maryland

Series MHB-H-5

### PROVISIONAL DATA ON PATIENTS IN PUBLIC HOSPITALS FOR THE CARE OF THE MENTALLY ILL

1959 and 1960

#### NUMBER OF RESIDENT PATIENTS, TOTAL ADMISSIONS, NET RELEASES, AND DEATHS, PUBLIC MENTAL HOSPITALS, UNITED STATES, 1939-'60

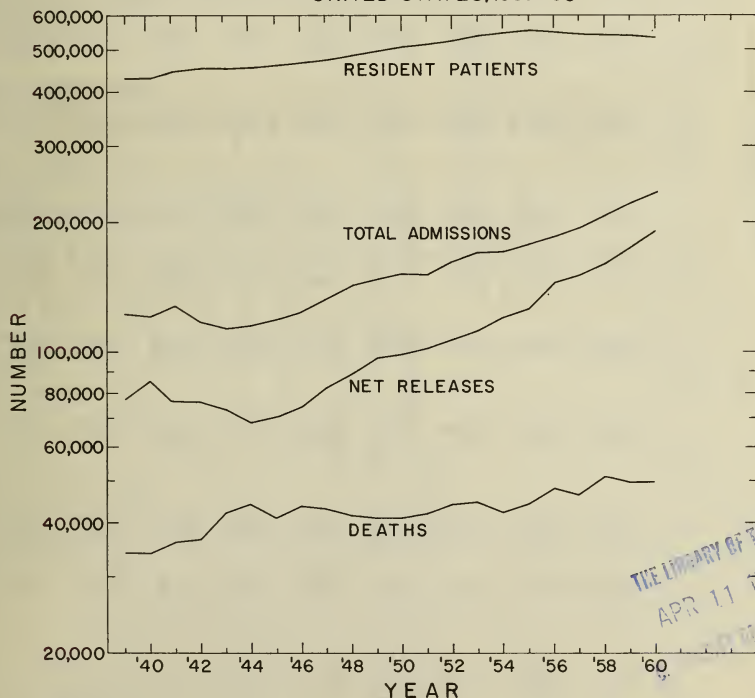


TABLE 1

PROVISIONAL PATIENT MOVEMENT, PERSONNEL, AND FINANCIAL DATA BY STATE: UNITED STATES, 1947<sup>1</sup>  
TOTAL PUBLIC HOSPITAL AND MENTAL HOSPITALS<sup>2</sup>

PATIENT MOVEMENT DATA										PERSONNEL AND FINANCIAL DATA				
Admissions (excluding transfers)					Deaths					Average Daily Resident Patient Population	Total Full-time Personnel End of Year	Maintenance Expenditures		
Total		First Admissions		Re- admissions	Net Releases <sup>4</sup>		Rate	Hospital	Resident Patients End of Year			Total	Per Resident Patient <sup>5</sup>	Per Patient Treatment <sup>6</sup>
Number	Rate <sup>3</sup>	Number	Rate		Number	Rate								
United States-----	222,791	127.7	137,862	84,929	176,411	325.4	49,647	541,883	542,135	174,635	\$849,493,595	\$1,567.39	\$1,106.43	
Alabama-----	2,855	90.1	1,917	938	2,337	317.1	516	7,400	7,371	1,647	6,978,206	946.71	680.60	
Arizona-----	1,061	87.5	789	272	806	486.9	193	1,670	1,622	587	2,677,139	1,650.52	1,003.05	
Arkansas-----	2,954	170.5	1,726	1,228	2,588	522.7	404	4,948	4,951	1,406	5,780,054	1,387.45	1,727.97	
California-----	2,058	124.4	1,151	1,497	1,338	222.6	2,643	3,543	3,611	2,127	10,417,694	1,732.82	1,314.70	
Colorado-----	4,731	196.8	2,645	2,086	3,922	454.6	1,058	8,631	8,628	3,543	19,164,312	2,221.18	1,408.00	
Connecticut-----	1,440	175.8	1,029	411	988	143.2	486	6,980	6,989	2,849	17,226,242	2,436.92	2,042.48	
District of Columbia-----	2,894	61.9	2,020	874	1,971	219.3	608	9,164	9,897	2,849	10,928,537	2,126.04	930.64	
Florida-----	8,810	101.1	2,757	1,053	2,811	236.3	874	11,922	11,897	2,214	10,401,053	874.26	666.44	
Georgia-----	842	127.8	559	283	786	763.8	152	970	1,029	416	1,714,789	1,668.48	898.74	
Idaho-----	14,564	143.4	7,955	6,609	11,330	313.5	3,836	35,835	36,142	9,847	51,615,571	1,428.13	1,012.05	
Illinois-----	4,317	93.2	2,892	1,425	3,369	305.3	996	10,943	11,034	4,133	18,456,053	1,674.47	1,218.38	
Indiana <sup>7</sup> -----	1,571	104.8	1,035	400	1,154	185.4	314	3,788	3,837	2,188	9,708,663	2,466.01	1,575.57	
Iowa-----	2,127	101.1	1,357	770	2,050	520.7	314	6,914	6,932	2,980	8,920,608	1,284.61	800.38	
Kansas-----	4,067	132.0	2,017	2,050	3,598	517.5	646	6,914	6,932	1,980	8,920,608	1,284.61	800.38	
Louisiana-----	3,418	122.5	2,087	1,761	3,316	269.9	501	5,200	5,425	2,468	8,545,571	1,049.72	1,052.82	
Maine-----	1,027	110.2	748	343	748	253.4	302	2,920	2,952	3,280	4,338,791	1,718.59	1,129.46	
Maryland-----	4,530	152.5	2,893	1,637	4,079	448.5	885	8,875	9,095	3,280	15,630,608	1,718.59	1,129.46	
Massachusetts-----	10,140	206.8	7,082	3,058	8,094	376.9	2,268	21,448	21,473	8,190	39,495,200	1,839.30	1,241.60	
Michigan-----	5,698	71.7	3,423	2,275	4,447	204.8	1,404	21,762	21,718	7,020	42,185,802	1,942.43	1,527.72	
Minnesota-----	4,774	140.7	2,518	2,256	4,063	371.9	1,131	10,848	10,925	2,946	16,092,646	1,482.69	1,015.82	
Mississippi-----	3,208	148.3	2,049	1,159	2,883	562.1	287	5,216	5,129	1,476	4,109,317	801.19	1,451.19	
Missouri-----	2,600	61.7	1,822	778	2,031	176.8	740	11,447	11,487	3,921	16,202,040	1,410.47	1,139.54	
Montana-----	1,076	186.0	788	288	926	544.4	207	1,673	1,601	563	2,340,712	1,376.05	834.18	
Nebraska-----	2,161	150.0	1,094	1,067	1,956	480.5	396	4,228	4,342	2,156	8,112,540	1,868.39	1,222.91	
Nevada-----	1,368	135.3	779	310	779	300.9	371	2,573	2,529	1,359	4,432,750	1,684.06	1,090.74	
New Hampshire-----	9,028	153.5	5,966	3,063	6,619	305.7	2,781	21,457	21,651	8,388	39,507,120	1,854.72	1,280.33	
New Jersey-----	704	82.4	646	58	666	708.5	84	898	940	110.1	1,766,742	1,879.51	1,072.05	
New Mexico-----	26,080	158.6	18,231	7,849	18,765	201.0	9,273	92,655	93,365	31,730	159,104,572	1,704.11	1,318.28	
New York-----	6,156	138.3	4,144	2,012	5,115	528.5	846	9,779	9,679	3,010	14,243,721	1,471.61	904.94	
North Carolina <sup>10</sup> -----	1,407	220.2	1,010	397	1,274	735.6	159	1,695	1,732	516	2,439,673	1,408.59	779.95	
North Dakota-----	1,323	137.2	870	463	1,024	326.2	2,380	28,670	28,317	8,694	42,230,649	1,491.35	1,023.08	
Ohio-----	2,310	112.0	1,436	1,074	2,069	282.1	541	7,276	7,335	2,537	8,747,603	1,192.58	884.85	
Oklahoma <sup>11</sup> -----	3,586	203.8	2,288	1,298	3,018	598.7	571	4,993	5,041	1,479	7,329,915	1,454.06	884.10	
Oregon-----	9,020	79.8	6,234	2,766	5,041	130.4	3,253	39,035	38,666	11,843	57,635,196	1,490.59	1,217.76	
Pennsylvania-----	1,726	203.5	1,074	652	1,289	379.7	440	3,419	3,395	1,121	5,857,986	1,631.22	1,075.75	
Rhode Island-----	2,591	109.6	1,905	686	1,884	283.4	521	6,604	6,422	1,544	5,913,662	920.84	656.45	
South Carolina-----	911	134.0	517	394	739	422.5	140	1,694	1,670	572	2,460,725	1,233.57	800.90	
South Dakota-----	4,875	140.0	2,731	2,144	4,087	495.1	699	8,288	8,255	1,741	7,787,512	943.37	596.85	
Tennessee <sup>12</sup> -----	9,268	99.2	5,429	3,839	8,231	519.5	1,342	15,857	15,843	4,541	20,605,013	1,300.61	810.28	
Texas-----	565	145.0	371	135	582	497.4	90	1,128	1,170	439	2,140,890	1,869.77	1,226.17	
Utah-----	4,479	115.9	2,613	1,866	3,476	314.1	972	11,098	11,065	3,040	12,409,071	1,121.47	798.22	
Virginia-----	2,326	91.3	1,406	1,120	2,179	319.8	541	6,677	6,814	2,395	11,245,284	1,651.79	1,197.75	
Washington-----	6,574	164.2	4,107	2,467	5,125	342.4	1,506	14,896	14,866	4,304	24,697,044	1,649.54	1,146.79	
West Virginia-----	3,326	102.5	180	146	223	353.4	83	648	631	211	1,097,341	1,739.05	1,150.25	
Wisconsin-----														
Wyoming-----														



United States-----	218,164	125.1	134,526	83,638	171,961	317.9	49,549	540,662	540,896	310.1	172,028	837,269,550	1,548.38	1,098.76
California-----	21,344	149.1	9,655	11,689	17,866	493.3	2,970	37,188	36,220	253.0	11,607	66,647,604	1,840.08	1,148.62
Colorado-----	1,266	76.5	985	281	549	92.6	642	5,874	5,930	358.5	1,959	9,541,943	1,609.10	1,350.59
Connecticut-----	1,000	141.5	426	301	466	319.0	115	1,474	1,461	327.6	524	2,305,108	1,577.76	1,121.71
Delaware-----	3,902	84.3	2,556	1,346	2,996	275.8	594	10,769	10,661	234.6	3,755	16,720,613	1,541.21	1,145.33
Iowa-----	3,124	111.3	1,294	1,830	2,968	634.2	520	4,436	4,680	166.7	1,996	7,953,031	1,699.37	1,003.66
Massachusetts-----	3,157	193.7	1,698	2,899	2,968	634.2	2,267	21,354	21,354	435.4	7,904	38,260,448	1,791.72	1,232.54
Michigan-----	5,333	67.1	3,190	2,143	4,103	189.8	1,404	21,678	21,621	272.1	6,736	40,482,459	1,872.37	1,489.15
Minnesota-----	1,771	122.9	853	918	1,573	369.9	394	4,144	4,253	295.1	1,909	7,269,511	1,709.27	1,189.58
Nebraska-----	25,735	156.5	18,007	7,728	18,415	197.3	9,273	92,598	92,312	567.3	31,631	168,973,225	1,702.60	1,320.80
New York-----	8,886	78.6	6,161	2,725	4,909	127.3	3,253	38,932	38,567	341.2	11,440	95,354,232	1,935.27	1,175.40
Pennsylvania-----	4,533	130.1	2,484	2,049	3,743	456.2	699	8,242	8,205	235.6	1,592	7,369,970	898.23	581.04
Tennessee-----	6,282	156.9	3,829	2,453	4,835	324.0	1,506	14,855	14,924	372.7	4,220	24,168,811	1,619.46	1,140.25
Wisconsin-----														

1 These data were taken from the 1959 census of patients in mental institutions.

2 Public mental hospitals include the state, county and psychopathic hospitals.

3 Admission and average daily resident patient rates are per 100,000 estimated civilian population. Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 210.

4 Net releases are defined as the net number of patients released to the community in any one year. Net release rates are per 1,000 average daily resident patient population.

5 Per resident patient maintenance expenditures are based on the average daily resident patient population of hospitals reporting expenditures.

6 Per patient under treatment maintenance expenditures are based on the sum of resident patients at beginning of year plus all admissions (excluding transfers).

7 Indiana: One hospital did not report maintenance expenditure. Therefore, the ratios of maintenance expenditure per resident patient and per patient under treatment do not include this hospital.

12 Tennessee: The maintenance expenditure figure was not reported by one hospital. Data from the 1959 Special Survey was used to estimate this figure.

13 This section of the table includes only states which have psychopathic hospitals.

8 Maryland: 1959 Special Survey figures for admissions, net releases, deaths in hospital, and resident patients; and 1958 data for average daily resident patient population, personnel, and expenditures were used as estimates for one hospital.

9 Minnesota: The maintenance expenditure was not available for one state hospital. The number of average daily resident patients for this hospital were excluded from the denominator in computing expenditures per resident patient. The number of average daily resident patients for this hospital from the denominator of the expenditure per patient under treatment ratio.

10 North Carolina: Data from 1959 Special Survey were used for estimating average daily resident patient population, personnel, and expenditure for one hospital.

11 Oklahoma: Total admissions, deaths, and resident patient figures were taken from the 1959 Model Reporting Area monthly report for the year 1959. The first admissions and readmissions were apportioned on the basis of averaging 1958 and 1960 census data. Averages of 1958 and 1960 data were used as estimates of expenditures, personnel, and average daily resident patient population.



United States-----	230,073	130.0	134,498	95,577	186,911	347.4	49,706	534,191	538,064	304.1	180,942	915,408,058	1,701.85	1,187.60
California-----	22,120	143.6	9,950	12,170	19,934	540.8	2,991	36,483	36,475	238.0	12,621	72,639,356	1,980.82	1,224.78
Colorado-----	1,222	70.9	538	286	684	113.5	822	5,810	5,851	338.8	2,039	10,083,037	1,723.30	1,420.95
Delaware-----	4,588	136.5	401	197	2,463	314.8	147	1,462	1,471	335.8	4,582	2,392,380	1,626.36	1,154.62
Illinois-----	4,588	136.5	401	197	2,463	314.8	147	1,462	1,471	335.8	4,582	2,392,380	1,626.36	1,154.62
Iowa-----	2,881	104.5	1,329	1,552	2,697	694.7	476	4,144	4,317	155.6	2,022	8,283,249	1,988.24	1,173.08
Massachusetts-----	8,999	195.7	6,678	3,331	4,445	498.8	2,235	20,935	21,008	111.6	8,259	39,571,113	1,993.80	1,264.03
Minnesota-----	1,849	132.4	3,887	2,962	1,738	438.6	431	3,823	3,965	284.0	1,890	7,810,907	1,969.96	1,302.34
Nebraska-----	27,285	182.9	18,291	8,984	18,970	205.8	9,081	91,802	92,182	550.8	31,873	168,000,000	1,822.48	1,401.72
New York-----	8,690	78.7	6,323	2,567	6,044	134.6	3,217	38,361	39,084	343.9	11,291	59,942,998	1,533.69	1,253.46
Pennsylvania-----	4,317	121.7	2,437	1,880	3,397	431.1	744	7,922	7,973	224.7	1,547	7,560,763	948.30	616.55
Tennessee-----	6,950	176.1	3,714	3,236	5,249	332.0	1,535	15,021	14,910	377.9	4,274	26,054,000	1,747.42	1,194.36
Wisconsin-----														

1 These data were taken from the 1960 Special Survey of the public mental hospitals.

Exceptions are shown in footnotes 7 and 8.

2 Public mental hospitals include the state, county and psychopathic hospitals.

3 Admission and average daily resident patient rates are per 100,000 estimated civilian population. Sources: U.S. Bureau of the Census, Provisional estimate for April 1, 1960.

4 Net releases are defined as the net number of patients released to the community in any one year. Net release rates are per 1,000 average daily resident patient population.

5 Per resident patient maintenance expenditures are based on the average daily resident patient population of hospitals reporting expenditures.

6 Minnesota: The maintenance expenditure was not available for one state hospital. The number of average daily resident patients for this hospital was included in the denominator of the maintenance expenditure per patient ratio. However, it was not possible to exclude the patient for this hospital from the denominator of the expenditure per patient under treatment ratio.

9 This section of the table includes only states which have psychopathic hospitals.

6 Per patient under treatment maintenance expenditures are based on the sum of resident patients at beginning of year plus all admissions (excluding transfers).

7 Michigan: 1959 Census data on first and readmissions to the Michigan public mental hospitals were used as a basis for prorating the 1960 total admissions to the 1959 population. The 1959 population was estimated from the 1950 census data. The 1959 population was estimated from 1959 census data for one state hospital. The state hospital system includes 3 contract units and data were not available for one of these units.



## SOURCE OF THE DATA

The data in Table 2 were obtained from the 1960 Special Survey of public mental hospitals while those in Table 1 were taken from the 1959 Census of Patients in Mental Institutions. Footnotes to the tables indicate where estimates have been made in instances where information was incomplete. NOTE: Data for Alaska are included in the 1960 figures but not in the 1959 figures.

## DEFINITIONS

**Public Mental Hospitals:** Includes state and county mental hospitals as well as state psychopathic hospitals (short term, intensive treatment, teaching or research hospitals).

**Net Releases:** The net number of patients released to the community in any one year. This quantity is the number of placements on extramural care plus direct discharges less the number of returns from extramural care. National data on placements and returns from extramural care are not available but net releases may be computed from the usual movement data as:

Net Releases	=	Resident Patients Beginning of Year	+ All Admi- sions Excluding Transfers	- Deaths in Hospitals	- Resident Patients End of Year
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The total number of discharges does not necessarily affect the size of the resident patient population since many occur while patients are on extramural care. Thus, the concept of "net release" has been used here since it takes into account actual releases from and returns to the hospital.

**Expenditure Ratios:** The expenditure per resident patient (average daily) has been the most commonly used ratio for comparing mental hospital expenditures. Its major limitation is that it does not take into account turnover of patients, which requires a large share of the expenditures. Thus, the ratio of expenditures to "patients under treatment" is also shown. The actual number of patients under treatment during the year is equal to the number of resident patients at the beginning of the year plus all admissions and all returns from extramural care. Since data on returns from extramural care are not available nationally, the number of resident patients at beginning of the year plus all admissions (excluding transfers) has been used as the best available estimate of "patients under treatment".

## TRENDS

For the first time since 1955-56 a decrease of more than one percent occurred in the year-end resident patient population of the nation's public mental hospitals—from 541,883 at the end of 1959 to 535,269 at the end of 1960, a drop of 6,614 or 1.2 percent. The drop of 1.3 percent, which occurred during 1956, had reversed a long-time trend which saw only one previous decrease (1943) in the public mental hospital populations. Since 1956 these populations have decreased at the rate of approximately 0.5 percent per year. Thus, the 1960 decrease may represent an acceleration of this trend. Furthermore, the fact that decreases occurred in the public mental hospital populations of 40 states in 1960 as compared with only 30 states during 1959 indicates that the decrease was quite widespread. Changes in the resident populations of the mental hospitals result from the combined effect of admissions, net releases and deaths during the year. Thus, the observed decrease in resident patients must be examined in relation to these quantities.

The trend of total admissions has been moving steadily upward since the mid-1940's, although the increase between 1959 and 1960 was not as great as that between 1958 and 1959. While the number of readmissions has continued to increase, a small decrease occurred in the number of first admissions. This is a striking deviation from the upward trend of first admissions and undoubtedly can be explained, in part, by the introduction of a new classification of admissions in states in the Model Reporting Area for Mental Hospital Statistics at the beginning of fiscal 1960. Personnel in some of these states have indicated that this classification, which categorizes admissions according to type of prior hospitalization for mental illness, has resulted in a more thorough investigation of the patient's prior hospital experience such that some patients who might previously have been classified as first admissions are now found to be readmissions.

The number of net releases has been rising since the mid-1940's. The 1960 data show a continuation of this trend with the percentage of increase over 1959 (8.9 percent) approximately the same as that between 1958 and 1959. The number of deaths has varied over time. Between 1959 and 1960 there was an increase of 0.3 percent; between 1958 and 1959, a decrease of 3.2 percent; and between 1957 and 1958, an increase of 9.5 percent.

The number of full-time personnel in the hospitals has continued to increase. The number has risen from 145,462 in 1955 to 183,539 in 1960, an increase of 38,077 employees over the five year period. A 5.1 percent increase occurred between 1959 and 1960 as compared with a 3.1 percent increase between 1958 and 1959. The 9.2 percent increase in expenditures between 1959 and 1960 marks the continuation of an upward trend in this area also.

## INTERSTATE VARIATION

Considerable variation among states in patient movement, personnel and expenditure data is indicated in Tables 1 and 2. Actual numbers are not comparable among states since they do not take into account differences in size of population. Therefore, the number of admissions and the average daily resident patient population per 100,000 civilian population are given. Similarly, the number of net releases has been converted into a rate by dividing it by the average daily resident patient population. This denominator is an estimate of the number of person-years of exposure to the "risk" of release.

Both series of expenditure ratios show considerable variation among states, the expenditure per patient under treatment in 1960 ranging from \$400-500 up to \$1500-1600 (and \$2043 for the District of Columbia). It should be pointed out that these figures do not necessarily represent expenditures by state agencies only. Thus, county expenditures for the care of patients in the public mental hospitals are included for Maryland, Michigan, New Jersey, Tennessee and Wisconsin, the only states with county mental hospitals. This has been done to ensure greater comparability among states in expenditures per patient.

Any interpretation of interstate differences should be made with caution. More detailed breakdowns of movement categories by age, sex, and diagnosis as well as more detail on personnel and expenditures will be available in *Patients in Mental Institutions* (National Institute of Mental Health, U.S.P.H.S.). This detail will provide partial explanations of the gross differences noted in the above tables. In addition, other factors such as information on policies and laws affecting admission and release of patients, other community treatment facilities, effectiveness of therapeutic programs, etc. must be evaluated to determine the extent of their influence on interstate variation.



TABLE 3

PROVISIONAL DATA ON RECENT TRENDS OF PATIENT MOVEMENT, PERSONNEL, AND EXPENDITURES,  
PUBLIC MENTAL HOSPITALS: UNITED STATES, 1958-1960

ITEM	1958	1959	1960	Percent change	
				1958-1959	1959-1960
All admissions-----	209,503	222,791	234,842	6.3	5.4
First admissions-----	137,061	137,862	137,853	0.6	-0.0
Readmissions-----	72,442	84,929	96,989	17.2	14.2
Net releases-----	161,972	176,411	192,028	8.9	8.9
Deaths in hospital-----	51,294	49,647	49,774	-3.2	0.3
Resident patients at end of year--	544,863	541,883	535,269	-0.5	-1.2
Personnel (full time) at end of year-----	169,438	174,635	183,539	3.1	5.1
Maintenance expenditures-----	\$805,861,786	\$849,493,595	\$927,787,593	5.4	9.2
Per resident patient-----	1,475.26	1,567.39	1,721.28	6.2	9.8
Per patient under treatment--	1,063.38	1,106.43	1,193.65	4.0	7.9

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# MENTAL HEALTH STATISTICS

## *Current Reports*

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

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Bethesda 14, Maryland

Series MHB-H-6

### PROVISIONAL DATA ON PATIENTS IN PUBLIC HOSPITALS FOR THE CARE OF THE MENTALLY ILL

1960 and 1961

NUMBER OF RESIDENT PATIENTS, TOTAL ADMISSIONS, NET  
RELEASES, AND DEATHS, PUBLIC MENTAL HOSPITALS,  
UNITED STATES, 1939-'61

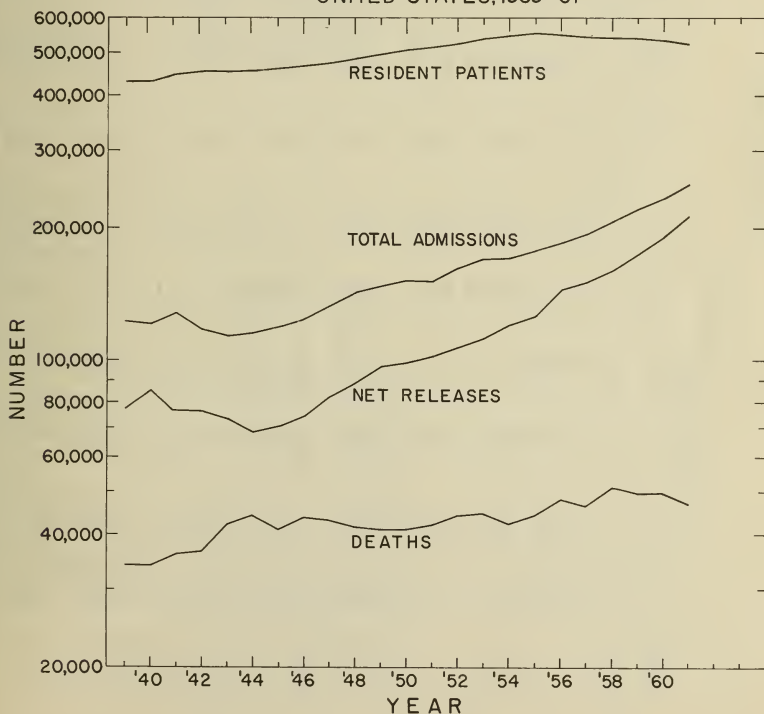


TABLE 1  
PROVISIONAL PATIENT MOVEMENT, PERSONNEL AND FINANCIAL DATA BY STATE: UNITED STATES, 1960<sup>2</sup>  
TOTAL PUBLIC MENTAL HOSPITALS<sup>2</sup>

State	Number of Hospitals	PATIENT MOVEMENT DATA					Deaths in Hospital	Resident Patients End of Year	Average Daily Resident Number	Average Daily Resident Rate <sup>3</sup>	Total Full-Time Personnel at End of Yr.	Maintenance Expenditures			
		Admissions (excluding transfers)			Net Releases <sup>4</sup>	Total Amount						Per Resident Patient <sup>5</sup>	Per Patient Under Treatment <sup>6</sup>		
		First Admissions	Re-Admissions	Total										Number	Rate
United States	279	234,846	132.2	140,094	94,732	191,415	355.3	49,751	535,796	539,725	503.4	161,937	\$4016,469,894	\$4,701.76	\$4,173.57
Alabama	2	2,851	87.7	1,860	991	2,286	310.6	557	7,359	7,359	226.4	1,011	7,339,414	1,024.39	735.98
Alaska	1	115	75.3	115	31	1,047	435.0	218	1,638	1,632	127.2	620	3,014,355	1,624.67	1,039.43
Arizona	1	1,430	152.7	1,430	131	1,047	435.0	218	1,638	1,632	271.6	1,394	5,393,273	1,223.66	776.98
California	11	22,852	147.1	10,008	12,844	20,502	564.9	2,998	4,749	36,735	233.6	12,615	75,671,750	2,630.36	1,629,459
Colorado	2	2,071	84.4	1,436	575	1,556	257.2	604	5,894	5,534	342.8	2,162	11,227,385	1,675.19	1,386.49
Connecticut <sup>10</sup>	3	5,280	206.3	2,743	2,537	4,678	559.7	1,080	7,284	7,143	336.2	3,109	13,156,582	2,147.73	1,474.62
Delaware	1	1,894	235.1	1,247	647	1,282	175.7	482	7,320	7,163	631.8	3,109	18,435,947	2,660.33	2,031.51
Florida	4	3,401	69.1	2,375	1,026	2,350	251.4	755	9,460	9,449	190.0	5,576	12,853,311	1,571.34	1,260.50
Georgia	1	3,772	97.2	2,698	1,074	2,609	236.6	941	11,944	11,972	506.1	2,418	10,672,803	898.39	680.36
Idaho	2	685	102.9	439	246	12,533	697.7	1,005	35,722	35,303	355.7	2,418	59,285,010	1,652.25	1,151.07
Illinois	13	19,650	135.6	9,245	7,805	18,633	325.3	3,021	11,821	11,821	233.2	4,798	21,661,481	1,832.46	1,393.71
Indiana	6	3,915	126.6	1,897	1,906	3,760	759.3	484	4,731	4,970	138.3	2,192	9,356,585	1,794.51	1,160.31
Iowa	6	3,495	126.6	1,897	1,906	3,760	759.3	484	4,731	4,970	138.3	2,192	9,356,585	1,794.51	1,160.31
Kansas	3	4,124	102.2	1,242	948	2,144	565.2	286	3,564	3,564	171.0	2,300	10,494,382	2,639.68	1,737.57
Kentucky	4	4,124	137.5	2,050	2,074	3,720	551.8	680	6,039	6,942	254.7	2,665	10,136,607	2,039.27	1,510.93
Louisiana	5	4,286	132.0	2,309	1,977	3,837	437.5	278	2,837	2,910	304.4	1,046	4,775,850	1,641.02	1,201.66
Maine	6	4,417	144.3	2,576	1,941	3,635	445.6	773	8,624	8,642	282.2	5,376	15,586,861	1,796.86	1,171.35
Massachusetts	13	10,366	205.9	7,155	5,331	9,245	437.7	2,237	20,666	20,884	477.7	8,542	40,732,484	1,950.42	1,271.14
Michigan	8	5,607	181.8	2,883	2,384	5,265	244.6	1,374	21,350	21,685	376.9	5,103	44,203,747	2,039.45	1,569.43
Minnesota	5	4,769	139.4	2,509	2,054	4,081	386.1	1,302	10,483	10,520	241.9	1,525	18,890,068	1,866.38	1,507.67
Mississippi	1	3,081	132.0	1,157	1,157	2,439	214.5	769	11,532	11,881	264.7	4,031	18,899,098	1,465.49	1,154.23
Montana	1	1,175	175.1	608	349	1,012	607.6	174	1,982	1,965	246.1	548	2,680,641	1,609.39	941.24
Nebraska	1	1,175	175.1	608	349	1,012	607.6	174	1,982	1,965	246.1	548	2,680,641	1,609.39	941.24
Nevada	4	2,222	159.9	1,101	1,121	2,110	350.2	433	3,007	4,056	230.1	2,148	6,963,325	2,741.39	1,059.44
New Hampshire	1	1,861	128.9	799	569	1,302	319.8	267	2,309	2,318	419.7	1,000	4,505,620	1,789.36	1,219.38
New Jersey <sup>10</sup>	12	9,400	155.5	5,945	3,407	6,974	326.0	2,619	21,864	21,942	333.5	8,515	40,116,900	1,975.31	1,300.06
New Mexico	1	681	72.9	563	118	599	691.7	114	866	866	92.7	469	1,889,915	2,182.23	1,136.84
New York	22	27,634	164.7	16,528	9,106	19,350	209.6	9,081	91,858	92,386	549.7	32,113	171,507,214	1,859.44	1,455.79
North Carolina	4	6,887	149.1	4,380	2,978	5,921	319.4	1,554	11,771	11,862	293.4	5,526	2,651,000	1,866.83	971.26
North Dakota	1	1,827	211.5	940	587	1,197	707.4	1,554	9,153	9,153	269.9	1,172	14,847,195	1,519.32	971.56
Ohio	22	13,701	141.0	8,325	5,176	11,711	410.0	2,399	20,262	20,262	386.4	9,324	46,977,718	1,714.79	1,155.90
Oklahoma <sup>10</sup>	1	2,113	117.6	1,463	1,250	2,870	351.7	970	7,949	7,146	310.3	2,405	9,284,433	1,293.25	923.47
Oregon	2	3,653	206.6	2,440	2,412	6,200	158.2	2,219	39,668	4,161	274.4	12,470	62,250,940	1,586.76	869.45
Pennsylvania	18	9,032	179.9	6,440	3,648	8,200	158.2	3,420	32,535	32,535	280.7	1,172	5,700,883	1,716.10	1,212.32
Rhode Island	1	1,447	136.5	969	678	1,300	415.4	450	5,266	5,342	396.4	1,160	6,159,060	1,356.02	631.46
South Carolina	1	2,004	150.2	2,079	725	2,503	351.7	562	6,349	6,348	280.7	1,172	6,129,000	936.02	651.46
South Dakota	1	942	139.3	499	443	866	484.6	155	1,915	1,907	224.3	549	2,991,985	1,905.15	869.45
Tennessee	5	4,333	139.3	2,674	2,027	7,733	705.6	1,482	15,722	15,722	265.7	1,723	17,993,997	1,905.15	869.45
Texas	5	10,366	206.8	7,155	5,331	9,245	437.7	2,297	20,666	20,666	419.7	8,515	40,732,484	1,950.42	1,271.14
Utah	1	589	151.0	587	202	453	453	115	1,145	1,149	294.6	466	2,272,602	1,981.36	1,322.07
Vermont	1	589	151.0	587	202	453	453	115	1,145	1,149	294.6	466	2,272,602	1,981.36	1,322.07
Virginia	4	4,751	123.5	2,660	2,071	5,471	509.4	1,039	11,220	11,220	231.2	3,175	13,889,110	1,746.72	976.26
Washington	3	2,812	100.3	2,077	755	2,364	260.6	519	5,365	5,365	235.9	2,495	14,827,510	1,460.50	1,065.08
West Virginia	2	2,486	134.5	1,190	706	2,042	371.4	1,351	14,361	14,361	378.0	4,455	26,540,480	1,760.61	1,191.43
Wisconsin	4	4,751	123.5	2,660	2,071	5,471	509.4	1,039	11,220	11,220	231.2	3,175	13,889,110	1,746.72	976.26
Wyoming <sup>10</sup>	1	583	110.3	218	145	503	475.4	71	1,531	1,531	394.5	227	1,170,265	1,562.97	1,155.90



United States	267	230,071	123.6	136,658	58,413	106,715	347.4	49,675	534,570	537,478	302.7	179,162	\$603,445,202	\$1,890,90	\$1,171.84
California	10	22,694	146.0	9,965	12,769	20,331	561.5	2,998	56,566	56,207	235.0	12,543	72,692,356	2,006.22	1,216.04
Colorado	1	1,598	135.6	401	197	463	314.8	147	1,462	1,471	335.6	1,682	1,682,350	1,682.36	1,154.82
Dakota	8	4,149	89.9	2,344	1,805	2,443	201.1	1,021	11,554	11,849	248.6	4,415	19,894,519	1,708.00	1,355.78
Iowa	5	3,123	113.2	1,271	1,582	2,357	260.3	464	4,158	4,317	136.4	2,046	6,736,598	2,368.74	1,165.20
Massachusetts	12	9,899	196.0	6,678	3,311	9,645	411.7	2,235	20,825	20,745	408.2	8,250	39,425,956	1,699.77	1,239.41
Michigan	6	5,850	123.5	2,465	1,744	3,194	435.8	1,434	13,863	13,965	235.6	1,890	17,810,929	1,669.36	1,205.12
Minnesota	5	3,850	132.3	887	965	1,740	485.8	483	3,483	3,565	235.6	1,890	7,810,929	1,669.36	1,205.12
New York	21	27,255	162.4	10,291	8,964	18,970	235.8	9,091	91,802	92,182	548.4	32,018	171,825,411	1,657.74	1,428.84
Pennsylvania	17	8,990	79.5	6,523	2,867	6,544	154.6	5,217	58,561	59,084	345.2	11,791	59,942,698	1,535.69	1,255.46
Tennessee	4	4,617	129.9	2,437	2,160	3,897	488.8	744	7,922	7,975	224.3	1,587	7,550,043	946.95	600.37
Wisconsin	41	6,910	174.6	5,759	3,152	5,444	351.4	1,531	14,990	14,964	377.1	4,368	25,793,547	1,724.71	1,182.61

1 These data were taken from the 1960 census of patients in mental institutions. Exceptions are given in footnotes 9, 9a, and 10.

2 Public mental hospitals include the state, county, and psychopathic hospitals.

3 Admission and average daily resident patient rates are per 100,000 estimated civilian population. Sources: U.S. Bureau of Census, *Current Population Reports*, Series P-25, No. 239, Provisional estimate for July 1, 1960.

4 Net releases are defined as the net number of patients released to the community in any one year. Net release rates are per 1,000 average daily resident patient population.

5 Per resident patient maintenance expenditures are based on the average daily resident patient population of hospitals reporting expenditures. See footnote 9.

6 Per patient under treatment maintenance expenditures are based on the sum of resident patients at beginning of year plus all admissions (excluding transfers) for hospitals reporting expenditures. See footnote 5.

7 District of Columbia: Since a substantial proportion of the patients at St. Elizabeth's Hospital are under treatment in the District of Columbia Psychiatric Institute, and resident patient rates per 100,000 population are computed only for residents of the District of Columbia, District residents include 1,750 total admissions and 6,106 average daily resident patients.

8 Michigan: Personnel data were neither reported nor estimated for one hospital.

9 Minnesota: Maintenance expenditures data and personnel data were neither reported nor estimated for one hospital. The number of average daily resident patients for this hospital (147 patients) were excluded from the denominator in computing expenditures per resident patient. The number of average daily resident patients for this hospital (147 patients) were excluded from the denominator of the expenditures per patient under treatment ratio.

10 1960 Special Survey data were used as estimates of the 1960 data from the Census of Patients in Mental Institutions for the following states:

	Connecticut	Oklahoma
Low (low hospital only)	14,990	14,964
Non-drug	14,990	14,964
Non-drug	14,990	14,964

11 This section of the table includes only states which have psychopathic hospitals.

TABLE 2

PROVISIONAL PATIENT MOVEMENT, PERSONNEL AND FINANCIAL DATA BY STATE: UNITED STATES, 1961<sup>1</sup>  
TOTAL PUBLIC MENTAL HOSPITALS<sup>2</sup>

State		Number of Hospitals	PATIENT MOVEMENT DATA					PERSONNEL AND FINANCIAL DATA						
			Admissions (excluding transfers)			Net Releases <sup>4</sup>		Deaths in Hospital	Resident Patients End of Year	Average Daily Resident Patient Population	Total Full-time Personnel End of Year	Maintenance Expenditures		
			Total	Rate <sup>3</sup>	First Admissions	Re-Admissions	Number					Rate	Total Amount	Per Resident Patient <sup>5</sup>
United States	287	253,115	139.7	144,372	108,743	215,167	404.3	46,975	527,945	233.8	197,494	\$77,927,125	\$133.44	\$1,235.09
Alabama	2	3,206	97.7	2,040	1,166	2,310	334.5	535	7,569	7,533	1,704	1,919,088	1,042.05	736.62
Alaska	1	125	62.2	97	28	121	316.2	10	1,251	851	176	1,146,000	3,275.21	2,415.15
Arizona	1	1,405	102.5	1,116	287	1,217	735.8	102	1,684	1,654	120	3,082,377	1,683.59	1,012.94
Arkansas	1	2,305	182.5	1,415	890	2,572	546.1	256	4,710	3,508	13	5,789,003	1,219.09	736.54
California	12	24,071	149.5	10,070	14,001	22,451	608.3	35,408	36,414	35,410	228.2	85,135,032	2,337.98	1,402.21
Colorado	2	2,743	156.3	1,532	1,211	2,229	356.6	546	9,946	5,646	308.9	12,338,152	2,075.03	1,450.18
Connecticut	3	6,495	249.6	3,153	3,342	5,607	683.9	903	8,198	6,198	315.1	22,630,321	2,700.47	1,542.19
Delaware	1	1,034	103.4	654	380	780	252.0	144	7,176	7,177	394.9	20,629,536	2,074.80	2,217.39
District of Columbia <sup>7</sup>	1	1,881	242.9	1,389	492	1,808	252.0	440	7,176	7,177	3,420	20,629,536	2,074.80	2,217.39
Florida	4	4,398	85.6	2,855	1,543	3,374	351.5	826	9,959	9,209	186.6	13,181,851	1,451.39	1,005.33
Georgia	1	4,618	117.9	3,532	1,116	5,720	315.8	866	11,845	11,715	303.0	12,708,229	1,070.35	787.31
Hawaii	1	449	75.2	289	160	386	228.5	53	1,180	1,175	108.8	2,271,572	2,188.57	1,580.37
Idaho	2	847	124.9	673	173	847	252.0	71	910	856	140.1	2,135,470	2,266.81	1,220.79
Illinois	13	16,450	139.6	8,982	7,468	13,236	373.0	3,592	35,484	35,486	10,444	22,375,451	1,901.21	1,365.57
Indiana	9	4,445	98.6	2,415	2,030	3,532	301.8	1,046	11,768	11,768	220.3	81,550,802	1,734.61	1,179.77
Iowa	6	3,491	125.7	1,647	1,844	3,640	336.5	423	5,897	5,897	139.9	10,084,586	2,394.44	1,313.44
Kansas	3	2,234	106.3	1,179	1,055	2,278	670.8	264	3,396	3,396	2,165	10,845,970	3,193.75	1,533.38
Kentucky	2	4,436	146.3	2,350	2,086	4,436	694.1	569	6,047	6,037	209.5	10,845,970	1,629.42	934.48
Louisiana	5	4,354	130.0	2,292	2,232	4,455	233.3	254	6,284	6,256	239.6	10,845,970	1,629.42	934.48
Maine	2	1,304	123.6	775	529	853	233.3	254	2,508	2,508	1,445	4,339,791	1,688.69	1,207.48
Maryland	6	3,122	163.5	1,655	1,467	3,097	550.1	800	8,491	8,491	371.0	17,770,238	2,022.17	1,249.11
Massachusetts	13	10,758	207.5	6,263	4,495	6,654	471.6	2,003	19,757	20,494	269.2	45,691,142	2,022.17	1,249.11
Michigan <sup>8</sup>	10	6,101	185.7	3,554	2,547	5,761	270.8	1,218	21,232	21,277	269.2	44,669,769	2,099.30	1,569.54
Minnesota	1	1,804	180.4	1,154	650	1,804	252.0	354	6,284	6,284	6,892	10,845,970	3,193.75	1,533.38
Mississippi	2	3,548	148.2	2,035	1,513	2,937	555.9	408	5,211	5,211	237.5	5,071,110	1,973.15	588.15
Missouri	5	3,268	75.6	2,029	1,239	2,653	252.0	634	10,997	11,097	250.9	20,071,559	1,894.96	1,442.34
Montana	1	1,804	180.4	1,154	650	1,804	252.0	354	6,284	6,284	2,782	10,845,970	3,193.75	1,533.38
Nebraska	1	2,272	160.7	1,077	1,195	1,957	507.5	354	3,556	3,556	272.7	8,889,757	2,360.18	1,451.65
Nevada	1	307	30.7	180	127	252	252.0	354	2,511	2,511	972	4,379,374	1,707.77	1,207.48
New Hampshire	1	1,210	121.0	616	594	947	373.0	256	2,508	2,508	429.3	4,379,374	1,707.77	1,207.48
New Jersey	12	10,077	162.2	5,423	4,654	7,711	427.4	1,212	21,532	21,532	345.2	45,645,925	2,022.17	1,249.11
New Mexico	4	3,585	219.6	2,265	1,320	3,585	745.0	592	4,461	4,461	1,709	7,850,319	1,664.03	917.64
New York	22	29,209	166.0	18,332	9,866	20,650	225.9	8,514	90,786	90,786	544.3	170,582,450	1,975.43	1,418.07
North Carolina	3	7,239	159.7	4,080	3,159	6,297	646.6	666	9,800	9,800	271.0	15,767,432	1,745.07	1,081.82
North Dakota	1	1,491	235.9	850	641	1,491	745.0	133	1,335	1,335	541	2,767,437	1,827.19	881.52
Ohio	23	14,329	147.4	9,044	5,285	12,329	341.3	2,000	27,326	27,326	277.3	53,532,862	1,833.95	1,250.33
Oklahoma	4	3,585	219.6	2,265	1,320	3,585	745.0	592	4,461	4,461	1,709	7,850,319	1,664.03	917.64
Pennsylvania	18	9,498	83.0	6,682	2,816	9,498	180.2	513	38,475	38,475	392.1	65,228,308	1,643.36	1,312.72
Rhode Island	1	1,741	206.0	1,011	730	1,741	366.1	396	5,316	5,316	396.4	7,142,486	2,030.25	1,394.66
South Carolina	1	3,075	130.5	2,039	1,036	2,640	374.9	562	6,361	6,361	276.5	10,845,970	1,986.63	742.62
South Dakota	1	1,741	206.0	1,011	730	1,741	366.1	396	5,316	5,316	396.4	7,142,486	2,030.25	1,394.66
Tennessee	7	5,972	141.7	3,177	2,795	4,904	352.0	1,174	7,314	7,314	282.0	6,442,243	1,535.09	751.53
Texas	8	11,425	118.6	6,808	4,617	9,555	631.2	1,390	15,772	15,772	184.1	21,440,878	1,535.09	751.53
Utah	1	655	65.5	414	239	592	611.8	907	966	966	103.1	2,405,451	2,405.45	1,710.45
Vermont	1	705	178.2	464	241	518	427.4	122	1,212	1,212	308.9	2,276,186	1,978.04	1,224.41
Virginia	4	5,103	130.1	2,947	2,156	5,623	333.0	1,622	11,450	11,450	219.6	15,776,435	2,462.12	1,580.82
Washington	5	2,693	156.6	1,387	1,306	2,693	461.3	515	5,122	5,122	277.0	5,529,219	1,079.50	680.42
West Virginia	2	7,588	188.9	4,167	3,421	6,058	461.3	1,411	15,052	15,052	474.7	27,886,392	1,802.31	1,233.45
Wyoming	1	394	117.6	226	130	347	370.7	95	591	608	181.6	1,883,351	2,110.77	1,244.76

United States	272	247,055	135.8	140,874	107,021	209,597	48,879	528,883	530,884	235.1	183,968	\$680,197,321	\$1,608.68	\$1,222.59
California	10	28,640	146.9	7,510	15,859	21,788	2,753	35,090	56,284	295.4	12,620	68,081,607	2,605.35	1,977.45
Colorado	1	1,554	99.9	758	998	1,511	223.5	5,708	5,665	354.2	2,153	11,259,738	1,919.85	1,488.46
Delaware	1	651	144.7	434	217	499	344.1	1,470	1,450	332.2	584	2,494,345	1,720.24	1,180.47
Illinois	5	1,651	103.5	1,052	1,154	1,511	1,144	1,170	1,450	332.2	584	2,494,345	1,720.24	1,180.47
Indiana	5	3,128	111.7	1,598	1,784	3,237	423	3,566	3,534	135.0	1,994	9,519,779	2,482.99	1,715.80
Massachusetts	19	10,185	135.5	5,485	5,710	9,795	2,009	19,685	20,375	305.0	6,179	44,544,740	2,797.05	1,945.10
Michigan	1	2,205	79.7	1,220	3,605	5,235	1,217	22,650	21,155	288.0	6,288	42,494,540	2,027.98	1,450.08
Nebraska	3	1,684	135.2	660	1,024	1,581	549	5,777	5,764	268.2	1,688	6,027,025	2,135.58	1,400.52
New York	21	27,811	183.7	19,099	27,742	20,207	8,514	50,882	90,734	554.0	34,795	170,000,000	1,975.61	1,421.25
Pennsylvania	17	9,207	85.4	5,477	2,795	5,581	5,158	37,349	35,355	354.3	11,768	59,740,368	1,685.71	1,254.35
Tennessee	4	5,109	142.0	2,605	2,504	4,471	568.6	7,886	7,885	218.6	1,725	7,900,302	1,035.59	692.78
Wisconsin	41	7,474	151.1	3,652	3,932	5,750	1,411	15,155	15,017	373.5	4,519	27,404,000	1,615.54	1,244.55

1 These data were taken from the 1961 Special Survey of the public mental hospitals.

2 Public mental hospitals include the state, county and psychopathic hospitals.

3 Admission and average daily resident patient rates are per 100,000 estimated civilian population. Source: U.S. Bureau of the Census, *Current Population Reports*, Series P-26, No. 25, Provisional estimate for July 1, 1961.

4 Net releases are defined as the net number of patients released to the community in any one year. Net release rates are per 1,000 average daily resident patient population.

5 Per resident patient maintenance expenditures are based on the average daily resident patient population of hospitals reporting expenditures. See footnote 10.

6 Per patient under treatment maintenance expenditures are based on the sum of resident patients at beginning of year plus all admissions (excluding transfers) for hospitals reporting expenditures. See footnote 10.

7 District of Columbia: Since a substantial proportion of the patients at the St. Elizabeths Hospital are from outside the District, the admission and maintenance expenditure rates per 100,000 population are computed only for residents of the District of Columbia.

8 Illinois: First and readmission public mental hospital data from Illinois for the 1960 Census of Patients in Mental Institutions were used as a basis for prorating the 1961 total admissions between these two categories.

9 Michigan: First and readmission public mental hospital data from Michigan for the 1960 Census of Patients in Mental Institutions were used as a basis for prorating the 1961 total admissions between these two categories.

10 Tennessee: Personnel and Maintenance expenditures are included for two new psychopathic hospitals which opened in 1961. These expenditures are included in the maintenance expenditures of \$107,944 were excluded for these two hospitals in computing the ratios of maintenance expenditures per resident patient and per patient under treatment.

11 This section of the table includes only states which have psychopathic hospitals.

## SOURCE OF THE DATA

The data in Table 2 were obtained from the 1961 Special Survey of public mental hospitals while those in Table 1 were taken from the 1960 Census of Patients in Mental Institutions. Footnotes to the tables indicate where estimates have been made in instances where information was incomplete. NOTE: Data for Hawaii are included in the 1961 figures but not in the 1960 figures.

## DEFINITIONS

**Public Mental Hospitals:** Includes state and county mental hospitals as well as state psychopathic hospitals (short term, intensive treatment, teaching or research hospitals).

**Net Releases:** The net number of patients released to the community in any one year. This quantity is the number of placements on extramural care plus direct discharges less the number of returns from extramural care. National data on placements and returns from extramural care are not available but net releases may be computed from less detailed movement data as:

$$\left[ \begin{array}{c} \text{Net} \\ \text{Releases} \end{array} \right] = \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{Beginning} \\ \text{of Year} \end{array} \right] + \left[ \begin{array}{c} \text{All Admissions} \\ \text{Excluding} \\ \text{Transfers} \end{array} \right] - \left[ \begin{array}{c} \text{Deaths} \\ \text{in} \\ \text{Hospitals} \end{array} \right] - \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{End of} \\ \text{Year} \end{array} \right]$$

The total number of discharges does not necessarily affect the size of the resident patient population since many occur while patients are on extramural care. Therefore, the concept of "net release" has been used here since it takes into account actual releases from and returns to the hospital.

**Expenditure Ratio:** The expenditure per resident patient (average daily) has been the most commonly used ratio for comparing mental hospital expenditures. Its major limitation is that it does not take into account the number of admissions for which a large share of the expenditure is required. Thus, the ratio of expenditures to "patients under treatment" is also shown. The actual number of patients under treatment during the year is equal to the number of resident patients at the beginning of the year plus all admissions and all returns from extramural care. Since data on returns from extramural care are not available nationally, the number of resident patients at beginning of the year plus all admissions (excluding transfers) has been used as the best available estimate of "patients under treatment."

## TRENDS

The recent admission of Alaska and Hawaii as States complicates comparisons of data for the total United States over a period of years. Table 3 provides a section showing United States totals for 1959-61 with data for Alaska and Hawaii removed for analytical purposes. All of the discussion of trends which follows is based entirely on this section of the table. Thus, 1961 was the second consecutive year since 1956 for which a decrease occurred of more than one percent in the year-end resident population of the nation's public mental hospitals — from 535,445 at the end of fiscal year 1960 to 526,414 at the end of fiscal year 1961, a decrease of 1.7 percent. The drop of 1.3 percent, which occurred during 1956, had reversed a long-time trend which saw only one previous decrease (1943) in the public mental hospital populations. Since 1956 these populations have decreased at the rate of approximately 0.5 percent per year except for the change in 1959-60 which was 1.2 percent. In 1961 the total net decrease was 9,031, resulting from a total decrease of 10,593 patients in 28 states and a total increase of 1,562 in 21 states. Thus, the decrease was not as widespread as in 1959-60

when there were decreases in the resident patient populations in 40 states. Furthermore, 75 percent (7,971) of the 10,593 decrease occurred in 9 of the 28 states with one of these 9 states (Ohio) accounting for 2,343 or 22 percent of the gross decrease. Changes in the resident populations of the mental hospitals result from the combined effect of admissions, net releases and deaths during the year. Thus, the observed decrease in resident patients must be examined in relation to these factors.

The trend of total admissions has been moving steadily upward since the mid-1940's. First admissions and readmissions both increased in 1960-61 with a slightly larger percentage increase for readmissions (see Table 3). This may be partially explained by the introduction of a new classification of admissions in states in the Model Reporting Area for Mental Hospital Statistics at the beginning of fiscal 1960. Personnel in some of these states have indicated that this classification, which categorizes admissions according to type of prior hospitalization for mental illness, has resulted in a more thorough investigation of the patient's prior hospital experience such that some patients who might previously have been classified as first admissions are now found to be readmissions.

The number of net releases also has been rising since the mid 1940's. The 1961 data show a continuation of this trend with the percentage increase over 1960 (12.2 percent) slightly greater than that between 1959 and 1960. The number of deaths has varied over time. Between 1960 and 1961 there was a decrease of 5.7 percent; between 1959 and 1960, an increase of 0.2 percent; and between 1958 and 1959, a decrease of 3.2 percent.

The number of full-time personnel in the hospitals has continued to increase. The number has risen from 145,462 in 1955 to 186,912 in 1961, an increase of 41,450 employees over the six year period. A 2.8 percent increase occurred between 1960 and 1961 as compared with a 4.1 percent increase between 1959 and 1960. The 6.2 percent increase in maintenance expenditures between 1960 and 1961 marks the continuation of an upward trend in this area also.

## INTERSTATE VARIATION

Considerable variation among states in patient movement, personnel and expenditure data is indicated in Tables 1 and 2. Actual numbers are not comparable among states since they do not take into account differences in size of population. Therefore, the number of admissions and the average daily resident patient population per 100,000 civilian population are given. Similarly, the number of net releases has been converted into a rate by dividing it by the average daily resident patient population. This denominator is an estimate of the number of person-years of exposure to the "risk" of release.

Both series of expenditure ratios show considerable variation among states. The annual expenditure per patient under treatment in 1961 ranged from \$600-1800 with two states showing amounts over \$2,000. It should be pointed out that these figures do not necessarily represent expenditures by state agencies only. Thus, county expenditures for the care of patients in the public mental hospitals are included for Maryland, Michigan, New Jersey, Tennessee and Wisconsin, the only states with county mental hospitals. This has been done to ensure greater comparability among states in expenditures per patient.

Any interpretation of interstate differences should be made with caution. More detailed breakdowns of movement categories by age, sex, and diagnosis as well as more detail on personnel and expenditures will be available in Patients in Mental Institutions (National Institute of Mental Health, U.S.P.H.S.). This detail will provide partial explanations of the gross differences noted in the above tables. In addition, other factors such as information on policies and laws affecting admission and release of patients, other community treatment facilities, effectiveness of therapeutic programs, etc., must be evaluated to determine the extent of their influence on interstate variation.



TABLE 3

PROVISIONAL DATA ON RECENT TRENDS OF PATIENT MOVEMENT, PERSONNEL,  
AND EXPENDITURES, PUBLIC MENTAL HOSPITALS: UNITED STATES, FISCAL YEARS 1959-61<sup>1/</sup>

## Total Public Mental Hospitals

ITEM	1959	1960	1961
All Admissions.....	222,791	234,846	253,115
First admissions.....	137,862	140,094	144,372
Readmissions.....	84,929	94,752	108,743
Net releases.....	176,411	191,415	215,167
Deaths in hospital.....	49,647	49,751	46,975
Resident patients at end of year....	541,883	535,796	527,945
Personnel (full time) at end of year.....	174,635	181,957	187,494
Maintenance expenditures.....	\$849,493,595	\$916,482,804	\$975,927,125
Per resident patient			
Per year.....	\$1,567.39	\$1,701.21	\$1,833.44
Per day.....	4.29	4.65	5.02
Per patient under treatment			
Per year.....	\$1,106.43	\$1,179.57	\$1,235.09
Per day.....	3.03	3.22	3.38

## Public Mental Hospitals Excluding Alaska &amp; Hawaii

ITEM	1959	1960	1961	Per cent change	
				1959-1960	1960-1961
All Admissions.....	222,791	234,700	252,541	5.3	7.6
First admissions.....	137,862	139,979	143,986	1.5	2.9
Readmissions.....	84,929	94,721	108,555	11.5	14.6
Net releases.....	176,411	191,268	214,670	8.4	12.2
Deaths in hospital.....	49,647	49,733	46,908	0.2	-5.7
Resident patients at end of year....	541,883	535,445	526,414	-1.2	-1.7
Personnel (full time) at end of year.....	174,635	181,794	186,912	4.1	2.8
Maintenance expenditures.....	\$849,493,595	\$915,401,804	\$972,205,953	7.8	6.2
Per resident patient					
Per year.....	\$1,567.39	\$1,700.87	\$1,851.70	8.5	7.7
Per day.....	4.29	4.65	5.02		
Per patient under treatment					
Per year.....	\$1,106.43	\$1,178.96	\$1,233.65	6.6	4.6
Per day.....	3.03	3.22	3.38		

<sup>1/</sup> Data for Alaska are included in the 1960 & 1961 figures but not in the 1959 figures. Data for Hawaii are included in the 1961 figures but not in the 1959 or 1960 figures.

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# MENTAL HEALTH STATISTICS

## Current Reports

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

January 1963

Bethesda 14, Maryland

Series MHB-H-7

### PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA PUBLIC MENTAL HOSPITALS UNITED STATES

1961 and 1962

#### I. PURPOSE

The purpose of this report is to provide summary patient movement and administrative data on a current basis for the benefit of mental hospital administrators, legislators, educators, and other interested persons. This publication contains data for the public mental hospitals which include state and county mental hospitals as well as state psychopathic hospitals (short term, intensive treatment, teaching or research hospitals). Table 1 shows 1961 data collected in the annual census of patients in mental institutions. The data in Table 2 are obtained from the 1962 "Preliminary Survey of Public Mental Hospitals." These data are provisional and, therefore, subject to some change. (Footnotes to both tables indicate what estimates were made). Both of these sets of data will appear in greater detail in future publications in the Series—Patients in Mental Institutions, Part II (NIMH, U.S. PHS). Data for patients in private mental hospitals and psychiatric patients in general hospitals will be available in other parts of this series. Data for patients resident in Veterans Administration hospitals and for patients served by psychiatric outpatient clinics will be available in separate publications by the Biometrics Branch of NIMH.

#### II. DESCRIPTION AND LIMITATIONS OF THE DATA

##### A. Patient Movement Data

The summary data presented in this report may be used to analyze the annual changes in year end populations of the public mental hospitals in terms of three categories of patient movement (admissions,

net releases and deaths). These categories are defined as follows:

1. Admissions - No Prior Psychiatric Inpatient Experience This category includes patients admitted to hospitals with no record of prior admission to any inpatient psychiatric facility either within or outside the state system. This category replaces the former classification, first admissions, which was defined as "a patient who has not previously been admitted to a public or non-public hospital authorized for the treatment of mental disorders." The major difference between these two definitions lies in the area of psychiatric services in general hospitals. In using the first admission definition, some states did not consider prior psychiatric treatment in a general hospital as constituting a previous psychiatric admission. Under the present definition such cases are considered as having a prior admission to an inpatient psychiatric facility. Therefore, the number of admissions with no prior inpatient psychiatric experience will either be less than or equal to the number of first admissions (old definition).

2. Net Releases Alive from Hospital The concept of "net release alive from hospital" takes into account movement of patients into and out of the hospital since this quantity is the number of placements on extramural care plus direct discharges from the hospital less the number of returns from extramural care, all occurring during any one year. National data on placements and returns from extramural care are not available but net releases may be computed from less detailed movement data as shown by the

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$$\left[ \begin{array}{c} \text{Net} \\ \text{Releases} \\ \text{Alive from} \\ \text{Hospital} \end{array} \right] = \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{Beginning} \\ \text{of Year} \end{array} \right] + \left[ \begin{array}{c} \text{All Admis-} \\ \text{sions} \\ \text{excluding} \\ \text{Transfers} \end{array} \right] - \left[ \begin{array}{c} \text{Deaths} \\ \text{in} \\ \text{Hospital} \end{array} \right] - \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{End of} \\ \text{Year} \end{array} \right]$$

Interpretation of net releases alive from hospital should be made with caution. This quantity is the net number of releases alive from the state hospital system and includes not only direct discharges to the community and placement on leave but also direct discharges to other inpatient facilities outside the state system such as Veterans Administration hospitals, nursing homes, boarding care homes, and mental hospitals in other states. The number of net releases is used as a measure of movement out of the hospital rather than the total number of discharges because many discharges occur while patients are already outside the hospital on extramural care.

3. Deaths in Hospital This category includes only deaths occurring to patients resident in the hospital and does not include deaths among patients on leave even though these patients are still on the hospital books.

4. Patient Movement Ratios per 100,000 Civilian Population The admission ratio measures the proportion of people coming under care during the year while the average daily resident patient ratio measures the average proportion of the population under care at any one time during the year.

5. Patient Movement Ratios per 1,000 Average Resident Patients These ratios relate the average resident population to three movement categories: Total admissions, Net releases and Deaths, thus providing indexes of the amount and type of patient movement activity that occurred during the year. It should be kept in mind that the ratios shown in this publication are based on totals and as such they have the limitations of totals since they are not standardized for such important variables as age, sex, diagnosis, and years of hospitalization. To illustrate how these ratios are descriptive of changes in resident patient populations, consider the following hypothetical example: Suppose that the resident patient populations in State A and State B each decreased by 0.6 percent (or 6 per 1,000). Considering only these data gives a limited and potentially misleading view of patient movement activity. However, now suppose that the

patient movement ratios are computed to be the following:

Movement Category	State A	State B
Admissions	323.7	522.2
Net Releases	229.5	454.8
Deaths	99.9	73.5

These ratios show that State B has much higher rates of patient movement into and out of the hospital than State A. While these ratios highlight areas of difference between the two states, conclusions based only on these ratios may be fallacious. The differences can be isolated further by analyzing the data in terms of the patient characteristics mentioned above (age, sex, diagnosis, and years of hospitalization). Even at this point, one cannot evaluate the relative efficacy of the two state mental hospital programs since differences in patient movement ratios between states may also be attributable to a great many other factors, such as policies and laws controlling admissions and release, the ways in which the mental hospitals are utilized by the communities they serve, the types of patients admitted, the various treatment programs within the hospitals, and the availability of various community facilities that can serve as adjuncts or alternatives to hospitalization. Since the reasons for interstate differences in these movement ratios are complex and vary considerably from hospital to hospital within and between states, ratios constructed from gross movement data (i.e. state totals) can not be used to measure the therapeutic effectiveness of various hospital programs.

6. Ratio of Net Releases to 100 Admissions Another approach to the problem of analyzing patient movement data is given by relating net releases to admissions (a group with a high probability of release). Preliminary data obtained from 14 Model Reporting Area states indicated that 85 percent of the net releases in a given year occurred to patients whose length of hospital stay was less than one year (i.e. largely admissions during the year). The remaining 15 percent of net releases occurred to patients with lengths of stay greater than one year, that is, patients admitted during some prior year. Thus, exclusion of these patients from the denominator limits the usefulness of this ratio.



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The expenditure per average daily resident patient has been the most commonly used ratio for comparing mental hospital expenditures. Its major limitation is that it does not adequately take into account the number of admissions for which a large share of the expenditure is required. The ratio of expenditures to "patients under treatment" does take into account the admissions during the year. The actual number of patients under treatment during the year is equal to the number of resident patients at the beginning of the year plus all admissions during the year and all returns from extramural care among patients on extramural care at the beginning of the year. Since this latter category of data is not available nationally, the number of resident patients at the beginning of the year plus all admissions (excluding transfers) has been used as the best available estimate of "patients under treatment."

It should be pointed out that these figures do not represent expenditures by state agencies alone inasmuch as county expenditures for the care of patients in the public mental hospitals are included for Maryland, Michigan, New Jersey, Tennessee and Wisconsin, the only states with county mental hospitals. These costs have been included for greater comparability among states in expenditures per patient.

### C. Interstate Variation

Considerable variation among states in patient movement, personnel, and expenditure data is indicated in Tables 1 and 2. Actual numbers are not comparable among states since they do not take into account differences in size of population. Therefore, ratios have been computed for several data categories.

However, as has been emphasized in Sections A4-A6, meaningful interstate comparisons cannot be made without more detailed breakdowns of movement categories by such variables as age, sex, diagnosis, and time on books. Data on most of these variables as well as more detail on personnel and maintenance expenditures will be available in Patients in Mental Institutions (NIMH, U.S. PHS). This detail will provide partial explanations of the gross differences noted in the above tables. Also, as mentioned previously, other factors such as policies and laws affecting admission and release of patients, other community treatment facilities, effective-

ness of therapeutic programs, etc., must be evaluated to determine the extent of their influence on interstate variation.

### III. TRENDS

During 1962 the resident patient population of the Nation's public mental hospitals changed from 527,535 to 515,948, a decrease of 11,587 (2.2 percent). This is the largest single year decrease since the downward trend began in 1956 and the graph illustrates this reversal of a long time increasing trend.

The decrease of 11,587 consisted of a total decrease of 12,395 in 40 states (including the District of Columbia) and a total increase of 808 in 11 states. Of the 40 states that showed decreases, 6 states accounted for 6,614 or 57 percent of the gross decrease.

In recent years there has been a growing recognition that nursing home facilities may be a significant factor in the mental hospital population decline. In an attempt to determine the extent of placements from the mental hospitals to nursing homes an inquiry was made in the fall of 1962 requesting the total number of such placements in each state. Although data were not received from all states, the total number of nursing home placements among those states replying was about 8,000. However, from these data it is impossible to determine precisely the amount of resident patient population decrease directly attributable to nursing home placements. The results were mixed, with nursing home placements being of obvious significance in accounting for the patient population decreases in a few states, and of little apparent importance in other states. In fact, many states with little or no patient population decline had what appeared to be active nursing home placement programs. To make a more adequate assessment of the effect of nursing home placement programs on decreasing patient populations would require, as a minimum, movement data specific for patients 65 years of age and over.

Total admissions rose from 253,005 in 1961 to 270,767 in 1962, an increase of 17,762. The trend has been markedly upward since the mid-1940's, and the 1962 increase was the second largest in the last eight years. The number of net releases also has been rising since the mid-1940's. The 1962 data show a continuation of this net release trend although the 7.1 percent increase in 1962 was less than the 12.6

percent increase during 1961. The number of deaths in 1962, despite a slight increase over 1961, was no greater than the number of deaths in 1959 and 1960.

Full-time personnel employed in the Nation's public mental hospitals increased from 187,051 in 1961 to 189,046 in 1962, a gain of 1,995 which continues an established trend. Maintenance expenditures have been increasing rapidly in recent years and for the first time these expenditures exceeded one billion dollars. This represents a patient under treatment expenditure per day of \$3.56 and is an increase of 53 percent over 1955 when this expenditure per day was \$2.33.

Trends, since 1955, in the data given in this report are indicated numerically in Table A. Also shown are the same data expressed as index numbers where 1955 is the base year. Thus, percent change since 1955 can be read directly from Table A with increases being numbers greater than 100 and decreases being numbers less than 100. For instance the 1958 index number for admissions is 117.9. This means that ad-

missions in that year were 17.9 percent greater than 1955 admissions. An index number is computed by dividing each of the observed numbers by the corresponding number in the base time period for each movement and administrative data category. The year 1955 was selected as the base year primarily because the number of resident patients reached its maximum during that year. Also, the admission, net release, and death data were not atypical during 1955. Percentage change between the data for any two years other than 1955 may be computed by obtaining the difference between the two index numbers concerned and dividing this difference by the index number for the earlier year. For example, the index numbers for net releases in 1959 and 1960 are 139.5 and 151.3. The percent change between 1959 and 1960 is given by :

$$\frac{151.3 - 139.5}{139.5} = \frac{11.8}{139.5} = 8.46$$

Therefore, there was an 8.5 percent increase in net releases between 1959 and 1960.

NUMBER OF RESIDENT PATIENTS, TOTAL ADMISSIONS, NET RELEASES, AND DEATHS, PUBLIC MENTAL HOSPITALS, UNITED STATES, 1939-'62

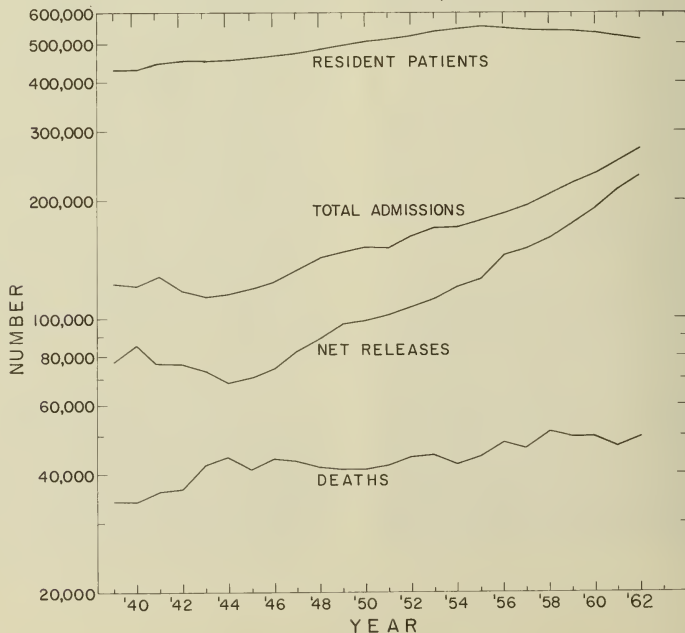


TABLE A  
RECENT TRENDS OF PATIENT MOVEMENT AND ADMINISTRATIVE DATA, PUBLIC MENTAL HOSPITALS:  
UNITED STATES, 1955-1962 <sup>1/</sup>

ITEM	1955	1956	1957	1958	1959	1960 <sup>2/</sup>	1961 <sup>3/</sup>	1962
All Admissions	178,003	185,597	194,497	209,823	222,791	234,846	253,005	270,767
Net Releases	126,498	145,513	150,413	161,894	176,411	191,415	215,600	220,899
Deaths in Hospital	44,364	48,236	46,848	51,383	49,647	49,751	46,881	49,573
Resident Patients End of Year	558,922	551,330	548,626	545,182	541,863	535,796	527,535	515,948
Personnel (full time) at End of Year	146,392	153,499	162,753	169,438	174,655	181,957	187,051	189,046
Maintenance Expenditures Per Resident Patient	\$618,067,247	\$662,994,142	\$751,875,462	\$805,861,786	\$849,493,595	\$916,482,804	\$974,838,616	\$1,033,158,057
Per Day	1,116.59	1,195.01	1,332.31	1,475.28	1,587.39	1,701.21	1,833.88	1,963.28
Per Patient Under Treatment	3.06	3.27	3.65	4.04	4.29	4.65	5.02	5.43
Per Year	849.31	890.47	981.21	1,083.38	1,106.43	1,179.57	1,234.24	1,297.63
Per Day	2.33	2.43	2.69	2.91	3.03	3.22	3.38	3.56
INDEX NUMBERS								
All Admissions	100.0	104.3	109.3	117.9	125.2	131.9	142.1	152.1
Net Releases	100.0	114.9	116.9	126.0	139.5	151.3	170.4	182.5
Deaths in Hospital	100.0	108.7	105.6	115.8	111.9	112.1	103.6	111.7
Resident Patients End of Year	100.0	98.7	96.2	97.5	97.0	95.9	94.4	92.3
Personnel (full time) at End of Year	100.0	104.9	111.2	115.7	119.3	124.3	127.8	129.1
Maintenance Expenditures Per Resident Patient	100.0	107.3	118.4	130.4	137.4	146.3	157.7	167.2
Per Day	100.0	107.0	119.3	132.1	140.4	152.4	164.2	177.6
Per Patient Under Treatment	100.0	106.9	119.3	132.0	140.2	152.0	164.1	177.5
Per Year	100.0	104.8	115.5	125.2	130.3	138.9	145.3	152.8
Per Day	100.0	104.3	115.5	124.9	130.0	138.2	145.1	152.8

<sup>1/</sup> 1955-1961 data from *Patients in Mental Institutions*. These data include estimates for under-reporting wherever possible.  
<sup>2/</sup> Data for Alaska are included for the first time in 1960.  
<sup>3/</sup> Data for Hawaii are included for the first time in 1961.

TABLE 1  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1961 <sup>1/</sup>  
TOTAL PUBLIC MENTAL HOSPITALS <sup>2/</sup>

State	Number of Hospitals	Resident Patients Beginning of Year	PATIENT MOVEMENT DATA				Deaths in Hospital	Resident Patients End of Year	Average Daily Resident Patient Population
			Admissions (excluding transfers)			Net Releases <sup>3/</sup> Alive from Hospital			
			Total	No Prior Psychiatric Inpatient Experience	All Other				
United States	266	557,011	258,005	8/	8/	215,600	46,861	527,535	581,791
Alabama	2	7,408	3,206	(2,038)	(1,168)	2,510	535	7,569	7,503
Alaska	1	351	125	(97)	(28)	111	14	351	351
Arizona	1	1,036	1,405	(1,116)	(287)	1,217	162	1,064	1,054
Arkansas	1	4,749	2,905	1,615	1,290	2,572	366	4,716	4,761
California	12	36,646	24,228	10,862	13,566	22,215	2,754	35,905	35,672
Colorado	2	5,884	2,743	(1,352)	(1,381)	2,299	546	5,782	5,946
Connecticut <sup>8/</sup>	3	8,173*	6,494*	2,358*	3,558*	5,613*	896*	8,158*	8,215*
Delaware	2	1,737	1,036	(635)	(383)	689	205	1,722	1,719
District of Columbia <sup>10/</sup>	1	7,300	1,981	246	1,735	1,799	429	7,053	7,096
Florida	4	9,460	3,755	(2,598)	(1,137)	2,717	820	9,658	9,598
Georgia	1	11,944	4,618	(3,509)	(1,109)	3,750	866	11,946	11,873
Hawaii	1	1,170	593	(289)	(304)	530	53	1,180	1,175
Idaho	2	917	839	537	282	761	71	924	960
Illinois	13	35,722	16,451	5,143	11,308	15,328	3,573	35,272	35,484
Indiana	9	11,740	4,644	2,472	2,172	3,552	1,046	11,786	11,768
Iowa	6	4,158	3,630	(1,654)	(1,976)	3,743	423	3,622	3,875
Kansas	3	5,558	2,306	1,368	918	2,290	264	5,310	5,435
Kentucky	4	6,636	4,436	2,106	2,330	4,408	569	6,097	6,351
Louisiana	3	8,432	4,894	2,581	2,313	4,626	548	8,152	8,264
Maine	2	2,653	1,190	(773)	(417)	855	354	2,904	2,908
Maryland <sup>2/</sup>	6	8,624*	5,122*	3,055*	2,067*	4,222*	800*	8,724*	8,491*
Massachusetts	13	20,686	10,758	(6,624)	(4,134)	9,664	2,003	19,757	20,234
Michigan <sup>2/</sup>	11	21,582	6,801	2,888	3,913	5,754	1,218	21,354	21,483
Minnesota <sup>11/</sup>	8	10,283	4,900	2,504	2,396	4,604	1,006	9,575	9,950
Mississippi	2	5,232	5,246	(2,035)	(1,211)	2,897	306	5,275	5,211
Missouri	5	11,254	3,284	(2,274)	(990)	2,812	719	10,967	11,067
Montana	1	1,662	1,449	(672)	(577)	1,233	167	1,711	1,691
Nebraska	3	3,907	2,262	1,067	1,195	1,946	355	3,968	3,856
Nevada	1	546	360	(307)	(53)	298	36	572	565
New Hampshire	1	2,509	1,210	(616)	(394)	947	254	2,518	2,505
New Jersey <sup>2/</sup>	12	21,225*	10,314*	6,523*	3,791*	7,678*	2,609*	21,235*	21,220*
New Mexico	1	666	837	(462)	(355)	685	99	919	897
New York	22	91,658	28,208	7,395	20,613	21,431	8,506	90,129	90,674
North Carolina	4	9,753	7,239	4,080	3,159	6,297	866	9,829	9,800
North Dakota	1	1,671	1,491	(1,031)	(460)	1,271	153	1,738	1,713
Ohio	25	28,265	14,669	8,466	6,221	14,946	2,065	25,921	27,526
Oklahoma <sup>2/</sup>	4	7,049*	2,857*	1,575*	1,282*	2,478*	587*	6,941*	6,946*
Oregon	3	4,583	3,925	2,292	1,633	3,532	535	4,441	4,700
Pennsylvania	16	38,666	9,498	5,684	3,814	6,932	3,138	38,096	38,475
Rhode Island	1	5,256	1,741	(1,022)	(719)	1,214	398	5,365	5,316
South Carolina	1	6,543	3,075	2,041	1,034	2,460	562	6,596	6,561
South Dakota	1	1,615	972	(517)	(455)	854	174	1,579	1,595
Tennessee	5	7,973	5,446	2,737	2,689	4,804	794	7,914	7,914
Texas	8	15,672	11,425	6,388	5,037	9,955	1,390	15,932	15,772
Utah	1	1,060	653	(414)	(239)	710	96	907	966
Vermont	1	1,154	705	(464)	(241)	518	122	1,219	1,212
Virginia	4	11,338	5,100	2,746	2,354	3,619	897	11,622	11,480
Washington	3	6,517	3,023	1,765	1,258	3,087	524	6,240	6,240
West Virginia	5	5,593	2,995	(1,697)	(1,098)	2,463	515	5,410	5,429
Wisconsin	42	15,021	7,587	4,185	3,402	6,040	1,420	15,146	15,078
Wyoming	1	637	394	(264)	(130)	347	93	591	608

<sup>1/</sup> These data were taken from the 1961 Census of Patients in Mental Institutions. Exemptions are given in footnotes.

<sup>2/</sup> Per mental hospitals include the state, county and psychopathic hospitals.

<sup>3/</sup> Net releases are defined as the net number of patients released alive from the hospital in any one year.

<sup>4/</sup> Admission and average daily resident patient rates are per 100,000 estimated civilian population. Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 259, Provisional estimate for July 1, 1961.

<sup>5/</sup> These rates are based on the average of the beginning and end of year resident patient populations.

<sup>6/</sup> Per resident patient maintenance expenditures are based on the average daily resident patient population of hospitals reporting expenditures.

<sup>7/</sup> Per patient under treatment maintenance expenditures are based on the sum of resident patients at beginning of year plus all admissions (excluding transfers) for hospitals reporting expenditures.

Symbol used: \* indicates data which are estimates or include estimates.



TABLE 1 (Continued)  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1961 <sup>1/</sup>  
TOTAL PUBLIC MENTAL HOSPITALS <sup>2/</sup>

State	PATIENT MOVEMENT RATIOS						PERSONNEL AND FINANCIAL DATA			
	Per 100,000 Civilian Population <sup>4/</sup>			Per 1,000 Average Resident Patients <sup>5/</sup>			Total Full-time Personnel End of Year	Maintenance Expenditures		
	Total Admissions	Average Daily Resident Population	Total Admissions	Net Releases Alive from Hospital	Deaths in Hospital	Net Releases per 1,000 Total Admissions		Total Amount	Per Resident <sup>6/</sup>	Per Patient Under Treatment <sup>7/</sup>
United States	139.6	29.5	475.3	405.1	88.1	852.2	187,051	\$974,839,616	\$1,833.88	\$1,234.24
Alabama	97.1	227.2	428.1	335.2	71.4	782.9	1,661	7,818,498	1,042.05	736.62
Alaska	61.3	175.1	356.1	316.2	39.9	888.0	1,149,000	3,275.21	2,415.13	
Arizona	99.8	117.5	651.0	737.1	96.1	866.2	647	3,082,377	1,865.59	1,012.94
Arkansas	161.9	265.4	615.8	545.4	77.3	885.4	1,459	5,789,003	1,215.32	735.34
California	150.7	221.8	667.9	612.4	75.9	916.9	13,329	61,939,656	2,297.03	1,346.05
Colorado	151.3	328.0	470.3	394.1	95.6	838.1	2,326	12,432,779	2,090.35	1,441.15
Connecticut	255.1	322.7*	795.2*	697.4*	109.7*	864.3*	3,651*	19,844,552	2,415.65*	1,353.01*
Delaware	229.2	380.3	599.8	489.0	119.5	816.6	764	5,302,552	1,921.21	1,190.97
District of Columbia <sup>10/</sup>	235.3	788.5	276.0	230.7	59.8	909.1	3,409	20,659,539	2,807.21	2,322.77
Florida	72.3	185.9	390.7	284.2	85.8	727.4	3,567	13,894,760	1,447.67	1,053.03
Georgia	116.6	239.7	386.6	313.9	72.5	812.0	2,516	12,708,259	1,070.35	767.31
Hawaii	98.8	195.8	504.7	451.1	45.1	895.8	425	2,671,572	2,189.57	1,458.63
Idaho	123.4	141.2	911.0	826.5	77.1	907.0	446	2,106,002	2,193.75	1,199.32
Illinois	163.8	333.4	375.5	310.7	66.1	810.2	10,916	61,650,605	1,734.61	1,179.74
Indiana	99.1	251.2	394.8	302.0	88.9	764.9	4,825	22,375,431	1,901.21	1,365.57
Iowa	131.1	139.9	933.2	962.2	108.7	1,031.1	2,193	10,332,514	2,666.46	1,326.72
Kansas	106.8	158.9	871.5	668.9	76.9	993.1	2,231	11,413,367	3,324.60	1,946.34
Kentucky	146.9	210.4	696.6	692.2	89.4	993.7	2,236	10,546,753	1,629.15	934.35
Louisiana	130.1	233.5	590.2	537.8	66.1	845.2	3,782	10,719,263	1,937.10	1,044.36
Maine	123.2	301.0	411.2	288.5	115.4	701.7	1,045	4,905,381	1,686.86	1,204.37
Maryland	165.8*	274.9*	590.5*	486.7*	92.2*	824.3*	3,451*	17,170,238*	2,022.17*	1,249.11*
Massachusetts	211.4	397.5	526.3	478.1	99.1	898.3	8,489	47,739,247	2,359.36	1,519.20
Michigan	85.9	271.6	317.2	269.4	59.8	7,045*	44,765	2,082,932	2,082.92	1,580.59
Minnesota <sup>11/</sup>	142.3	289.0	623.6	465.7	101.3	939.6	1,111*	17,236,310*	1,775.52*	1,150.96*
Mississippi	148.1	237.7	617.8	551.4	58.2	892.5	1,593	4,733,022	908.28	558.27
Missouri	76.0	257.8	295.5	232.9	64.7	861.5	4,206	18,394,963	1,662.15	1,267.05
Montana	209.4	244.8	858.9	730.9	99.0	850.9	555	3,015,027	1,782.98	969.15
Nebraska	156.5	266.9	500.5	401.5	91.5	860.5	2,094	9,969,759	2,325.18	1,454.01
Nevada	116.5	185.8	644.0	533.1	64.4	827.8	164	1,061,162	1,878.16	1,171.26
New Hampshire	197.4	408.6	481.3	376.7	101.0	782.6	1,010	4,679,143	1,867.92	1,258.17
New Jersey <sup>2/</sup>	168.9*	347.5*	485.6*	361.5*	122.8*	744.4*	7,805*	43,810,451*	2,064.58*	1,389.09*
New Mexico	86.5	92.7	837.3	767.1	110.9	818.4	431	1,940,539	2,051.68	1,080.76
New York	164.6	330.4	310.0	235.5	93.5	759.7	32,186	173,357,659	1,914.28	1,448.85
North Carolina	158.1	214.1	739.4	643.1	86.4	869.9	3,224	15,722,114	1,604.50	925.27
North Dakota	236.7	271.9	874.5	745.5	89.7	852.4	541	2,767,371	1,627.19	881.52
Ohio	148.2	275.7	542.2	551.7	77.0	1,017.5	10,203	53,333,931	1,951.77	1,241.71
Oklahoma	120.8*	233.6*	411.4*	356.8*	84.5*	867.3*	2,321*	9,855,000*	1,418.80*	994.89*
Oregon	214.5	236.8	869.9	786.8	116.6	899.9	1,709	7,841,108	1,664.07	919.27
Pennsylvania	83.8	339.4	247.5	180.6	81.8	729.8	12,969	63,226,308	1,645.36	1,512.72
Rhode Island	207.8	395.7	527.4	367.8	120.6	697.3	1,310	6,941,363	2,093.28	1,394.68
South Carolina	130.2	277.8	468.0	374.4	85.5	800.6	1,676	7,105,511	1,082.99	738.77
South Dakota	138.5	227.2	608.6	582.2	109.0	818.0	878	2,396,145	1,805.54	927.00
Tennessee	152.3	221.3	694.4	603.7	84.7	882.1	1,876	6,340,299	1,053.67	621.53
Texas	117.2	161.8	716.0	625.6	87.4	871.3	4,859	21,340,878	1,555.09	781.80
Utah	69.8	103.3	663.6	721.5	97.6	1,087.3	467	2,408,851	2,493.63	1,406.22
Vermont	182.2	313.2	595.9	436.4	102.8	734.8	480	2,276,186	1,878.04	1,224.41
Virginia	128.9	230.1	444.3	332.7	86.8	748.8	3,513	14,373,191	1,269.44	886.55
Washington	104.7	216.1	485.8	405.1	81.2	1,031.2	2,446	15,175,469	2,432.12	1,900.85
West Virginia	166.0	300.9	554.4	455.9	95.3	822.4	1,201	5,473,650	1,006.22	652.86
Wisconsin	188.0	373.7	502.9	400.4	94.1	796.1	4,724	28,466,555	1,881.09	1,259.22
Wyoming	112.3	173.2	641.7	565.1	151.5	880.7	220	1,283,351	2,110.77	1,244.76

Admission Categories: The numbers in parenthesis are "First Admissions" (the old definition); the numbers not in parenthesis are "Admissions with No Prior Inpatient Experience" (the new definition). The Model Reporting Area states adopted the new definition "No Prior Inpatient Experience" in 1960. However, not all of the non-MRA states were able to provide these data in 1961. Therefore, a U.S. total is not given since data from these two admission categories are not comparable and cannot be combined. Refer to page 1 for an explanation of these admission categories.

Revisions: Survey data from the public mental hospitals were used as estimates for the following states: Connecticut, Maryland, New Jersey, Oklahoma and Michigan (personnel data for one hospital).

<sup>10/</sup>District of Columbia: Since a substantial proportion of the patients at the St. Elizabeth Hospital are non-residents of the District of Columbia, total admission and resident patient rates per 100,000 population are computed only for residents of the District of Columbia. District residents include 1,600 total admissions and 6,036 average daily resident patients.

<sup>11/</sup>Minnesota: Maintenance expenditure data and personnel data were not available for one hospital. Therefore, 220 patients were excluded from the denominator in computing expenditures per resident patient and 190 patients were excluded from the denominator for computing expenditures per patient under treatment.

NOTE: Refer to Table 3 for state mental hospital data excluding the psychopathic hospital data for the following states: California, Colorado, Delaware, Indiana, Iowa, Massachusetts, Michigan, Nebraska, New York, Pennsylvania, Tennessee, Texas and Wisconsin.

TABLE 2  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1962 1/  
TOTAL PUBLIC MENTAL HOSPITALS 2/

State	Number of Hospitals	PATIENT MOVEMENT DATA							
		Resident Patients Beginning of Year	Admissions (excluding transfers)			Net Release <sup>3/</sup> Alive from Hospital	Deaths in Hospital	Resident Patients End of Year	Average Daily Resident Patient Population
			Total	No Prior Psychiatric Inpatient Experience	All Other				
United States	286	525,653	270,767	133,056	137,731	230,899	49,573	515,948	521,159
Alabama	2	7,569	3,286	2,102	1,184	2,731	556	7,568	7,568
Alaska	1	351	129	89	30	179	8	293	293
Arizona	1	1,664	1,596	856	760	1,307	203	1,750	1,756
Arkansas	1	4,716	5,023	1,660	1,363	3,077	412	4,250	4,332
California	12	35,904	25,346	11,151	14,197	22,823	2,726	35,697	34,916
Colorado	2	5,782	2,790	1,500	1,290	2,893	669	5,070	5,455
Connecticut	3	8,158	7,107	3,379	3,728	5,977	1,046	8,242	8,230
Delaware	2	1,722	1,197	620	577	965	241	1,713	1,690
District of Columbia <sup>8/</sup>	1	7,033	2,024	238	1,766	1,699	484	6,894	6,948
Florida	4	9,655	4,116	2,066	2,052	3,149	818	9,706	9,731
Georgia	1	11,946	5,503	4,582	921	4,363	1,051	12,035	11,886
Hawaii	1	1,180	650	307	343	643	58	1,223	1,181
Idaho	2	924	607	327	380	713	102	916	932
Illinois	13	35,272	17,076	5,517	11,561	13,719	3,626	35,005	35,314
Indiana	9	11,786	4,596	2,337	2,259	3,928	997	11,457	11,693
Iowa <sup>9/</sup>	6	3,622	3,963	1,827	2,136	3,857	335	3,393	3,608
Kansas	3	3,310	2,524	1,435	1,089	2,420	235	3,179	3,259
Kentucky	4	6,097	4,774	2,121	2,653	4,436	621	5,814	5,960
Louisiana	3	8,152	5,592	2,731	2,861	5,625	502	7,617	7,890
Maine	2	2,888	1,506	956	550	1,218	325	2,851	2,919
Maryland	6	8,724	6,122	3,511	2,611	5,375	904	8,567	8,645
Massachusetts	15	19,757	11,394	7,418	3,976	9,936	1,990	19,225	19,776
Michigan	10	21,354	7,125	3,028*	4,097*	6,081	1,270	21,128	21,374
Minnesota <sup>11/</sup>	8	9,573	5,374	2,389	2,989	5,566	947	8,423	9,213
Mississippi	2	5,275	3,713	2,330	1,383	3,365	237	5,306	5,239
Missouri	5	10,987	5,612	1,869	1,743	2,865	748	10,986	11,070
Montana	1	1,719	1,188	674	514	1,033	190	1,624	1,656
Nebraska	4	3,868	2,380	1,192	1,188	2,102	378	3,768	3,815
Nevada	1	572	363	96	267	517	43	575	577
New Hampshire	1	2,518	1,275	748	525	1,026	238	2,467	2,523
New Jersey	12	21,252	10,745	6,704	4,041	8,030	2,797	21,170	21,216
New Mexico	1	919	511	475	436	743	100	985	945
New York	22	90,129	29,091	7,240	21,851	20,828	8,892	89,610	89,750
North Carolina	4	9,823	6,296	4,562	3,734	7,371	1,021	9,733	9,776
North Dakota	1	1,738	1,511	1,022	489	1,363	174	1,712	1,735
Ohio <sup>12/</sup>	21	24,062	16,332	6,702	7,630	14,830	1,995	23,569	23,912
Oklahoma <sup>13/</sup>	4	6,641	5,190	1,691	1,499	2,975	560	6,496	6,659
Oregon	3	4,441	3,884	1,888	1,789	5,532	519	4,143	4,360
Pennsylvania	18	38,096	10,535	6,213	4,320	7,534	3,619	37,478	37,862
Rhode Island	1	3,365	1,756	993	763	1,294	470	3,357	3,566
South Carolina	1	6,596	3,464	2,454	1,010	2,763	600	6,697	6,598
South Dakota	1	1,579	1,155	705	450	1,084	175	1,475	1,527
Tennessee	7	7,941	6,294	3,041	3,243	5,396	764	8,065	8,019
Texas	9	15,952	12,285	6,772	5,513	10,608	1,640	15,989	15,822
Utah	1	907	793	354	439	765	98	857	862
Vermont	1	1,219	758	472	266	633	116	1,208	1,228
Virginia	4	11,622	5,053	2,700	2,353	4,035	1,104	11,536	11,320
Washington	3	5,929	3,187	1,806	1,381	3,347	585	5,184	5,604
West Virginia <sup>14/</sup>	5	5,986*	3,375*	1,265*	2,110*	2,974*	562*	5,215*	5,279*
Wisconsin	42	15,148	7,635	4,181	3,452	7,093	1,517	14,171	14,602
Wyoming	1	594	516	347	169	405	75	630	634

1/ These data were taken from the 1962 Provisional Survey of the public mental hospitals. Exceptions are given in footnotes.

2/ Public mental hospitals include the state, county and psychopathic hospitals.

3/ Net releases are defined as the net number of patients released alive from the hospital in any one year.

4/ Admission and average daily resident patient rates are per 100,000 estimated civilian population. Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 259, Provisional estimate for July 1, 1962.

5/ These ratios are based on the average of the beginning and end of year resident patient populations.

6/ Per resident patient maintenance expenditures are based on the average daily resident patient population of hospitals reporting expenditures.

7/ Per patient under treatment maintenance expenditures are based on the sum of resident patients at beginning of year plus all admissions (excluding transfers) for hospitals reporting expenditures.

8/ District of Columbia: Since a substantial proportion of the patients at the St. Elizabeth Hospital are non-residents of the District of Columbia, total admission and resident patient rates per 100,000 population are computed only for residents of the District of Columbia. District residents include 1,645 total admissions and 5,906 average daily resident patients.

9/ Iowa: Security Mental Health Hospital has been divided into two sections, (1) physically ill (2) for mentally ill. Thus, at the present time there are on full-time employees and a number of part-time employees for the mental patients.

TABLE 2 (Continued)  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1962 1/  
TOTAL PUBLIC MENTAL HOSPITALS 2/

State	PATIENT MOVEMENT RATIOS					PERSONNEL AND FINANCIAL DATA				
	Per 100,000 Civilian Population <sup>2/</sup>		Per 1,000 Average Resident Patients <sup>3/</sup>			Net Releases per 1,000 Total Admissions	Total Full-time Personnel End of Year	Maintenance Expenditures		
	Total Admissions	Average Daily Resident Population	Total Admissions	Net Releases Alive from Hospital	Deaths in Hospital			Total Amount	Per Resident Patient <sup>6/</sup>	Per Patient Under Treatment <sup>7/</sup>
United States	147.4	285.7	519.9	443.4	95.2	852.8	189,046	\$1,035,158,057	\$1,983.28	\$1,237.63
Alabama	96.6	227.1	454.1	360.8	75.5	631.1	1,822	9,156,779	1,209.93	845.55
Alaska	60.6	139.2	400.6	455.9	24.8	1,387.6	182	1,322,800	5,165.37	3,172.71
Arizona	107.2	117.9	955.0	765.7	118.9	818.9	667	5,600,246	2,050.25	1,104.37
Arkansas	107.7	251.4	674.3	698.4	91.9	1,017.9	1,539	6,369,166	1,405.38	823.00
California	152.2	209.6	708.0	630.7	76.1	900.6	15,678	91,351,796	2,615.76	1,491.08
Colorado	149.4	292.2	517.0	536.1	124.0	1,036.9	2,494	14,432,740	2,645.78	1,683.71
Connecticut	275.0	318.5	886.7	728.9	127.6	841.0	3,692	72,915,276	2,541.55	1,570.15
Delaware	259.7	366.6	696.7	561.7	140.3	806.2	785	3,828,989	2,265.67	1,311.75
District of Columbia <sup>8/</sup>	239.2	767.0	290.2	243.6	69.4	839.4	3,691	22,541,937	3,244.58	2,485.41
Florida	76.7	191.1	453.2	343.6	84.1	764.7	15,899	15,487,659	1,586.60	1,152.62
Georgia	137.2	296.4	458.9	365.9	87.6	792.8	2,553	15,023,125	1,095.48	746.55
Idaho	105.7	190.0	562.8	556.7	50.2	989.2	419	2,719,124	2,302.39	1,485.86
Illinois	116.6	134.7	877.2	775.0	110.9	885.5	454	2,165,632	2,322.64	1,251.09
Indiana	169.2	349.9	486.0	390.4	105.2	805.5	10,998	65,288,000	1,846.22	1,246.76
Iowa	97.7	246.6	395.3	338.0	85.8	854.7	5,115	23,273,009	1,390.54	1,420.65
Kansas	146.8	185.0	1,129.7	1,099.5	95.5	973.3	2,166	10,595,347	2,935.85	1,395.56
Kentucky	115.8	149.6	777.8	744.8	72.4	958.8	2,204	11,770,719	3,611.76	2,017.61
Louisiana	157.4	136.4	801.5	744.8	104.3	929.2	2,155	10,822,163	1,812.44	993.67
Maine	170.1	243.0	709.2	713.4	63.7	1,005.9	2,715	11,667,945	1,476.65	848.95
Maryland	150.0	256.2	701.8	624.4	113.2	808.8	1,045	5,156,784	1,766.63	1,175.60
Massachusetts	195.8	276.5	708.1	621.7	68.1	878.0	3,488	18,012,573	2,083.58	1,215.29
Michigan	223.0	587.0	594.6	509.8	102.1	872.0	8,659	49,061,241	2,480.85	1,574.95
Minnesota	89.4	268.2	355.4	286.3	59.8	853.5	6,945	47,010,828	2,199.44	1,650.72
Mississippi	154.6	255.6	596.0	616.6	56.2	917.9	3,117*	17,998,041*	2,002.58	1,254.08*
Missouri	167.4	256.2	328.9	269.8	86.1	911.7	1,578	5,235,876	999.40	582.54
Montana	63.6	256.9	396.0	280.6	68.1	793.2	4,351	18,605,457	1,680.71	1,274.43
Nebraska	169.5	256.2	710.5	633.7	113.6	920.0	574	2,986,384	1,803.49	1,027.38
Nevada	162.5	260.4	623.4	550.6	99.0	863.2	2,150	3,031,397	2,567.54	1,445.49
New Hampshire	111.5	177.0	632.4	552.5	74.9	875.3	185	1,256,697	2,177.96	1,344.06
New Jersey	204.0	404.3	610.6	411.6	119.5	856.0	1,005	5,077,261	2,012.40	1,359.30
New Mexico	173.6	342.7	506.6	378.6	131.9	747.3	7,696	47,694,400	2,247.57	1,480.28
New York	91.4	94.9	956.9	782.6	105.0	617.8	429	1,900,724	2,011.55	1,036.65
North Carolina	167.7	517.5	323.7	229.5	99.9	709.1	32,366	181,283,000	2,018.67	1,520.58
North Dakota	178.9	210.8	648.2	733.6	104.4	888.5	5,121	16,659,722	1,721.55	928.54
Ohio	239.1	274.5	675.9	790.1	100.9	932.1	578	5,060,154	1,763.78	941.88
Oklahoma	162.1	237.3	685.8	622.7	63.8	908.0	9,699*	44,759,045*	1,871.82*	1,109.06*
Oregon	132.3	276.5	478.3	446.1	84.0	932.6	2,325	9,855,000*	1,477.75*	982.40*
Pennsylvania	233.0	254.5	879.1	827.6	120.9	941.4	1,755	10,062,002	2,626.62	1,220.11
Rhode Island	92.8	333.4	278.9	199.4	95.8	715.1	13,260	76,009,639	2,007.54	1,562.99
South Carolina	210.0	402.6	522.5	385.0	139.8	756.9	1,565	7,102,408	2,109.94	1,596.85
South Dakota	145.5	277.1	521.1	415.7	90.3	707.6	1,720	7,494,352	1,155.85	744.96
Tennessee	161.5	213.6	756.4	709.9	114.6	938.5	696	2,621,975	1,717.08	959.03
Texas	174.3	223.4	765.2	674.2	95.5	868.7	2,105	10,045,178	1,232.67	706.16
Utah	123.8	189.4	769.2	664.2	102.7	865.5	5,966	23,171,267	1,464.50	820.60
Vermont	82.3	91.6	909.4	877.3	112.4	964.7	467	2,503,888	2,612.12	1,355.23
Virginia	189.7	315.7	607.9	521.4	95.6	857.7	495	2,544,067	2,071.73	1,299.99
Washington	125.6	286.3	456.4	348.5	95.3	798.5	3,529	15,766,217	1,367.73	944.90
West Virginia	108.7	191.1	575.5	602.3	105.3	1,050.2	2,320	14,479,929	2,585.86	1,588.41
Wisconsin	190.9 <sup>9/</sup>	237.9*	656.1*	560.8*	109.7*	891.2*	1,286*	5,767,893*	1,036.40*	659.69*
Wyoming	186.7	362.1	520.7	483.8	103.5	929.3	4,692	29,237,054	1,975.21	1,285.40
Unaffiliated	142.5	175.1	845.1	661.8	122.5	784.9	235	1,304,574	2,057.69	1,175.29

Notes: "No Prior Inpatient Experience" and "All Other" admissions public mental hospital data for Michigan for the 1961 Census of Patients in Mental Institutions are used as a basis for pro-rating the 1962 total admissions between these two categories.

Notes: Maintenance expenditure data and personnel data were not available for one hospital which closed 12/31/61. Therefore, 635 patients were excluded from the denominator in computing expenditures per resident patient and 232 patients were excluded from the denominator for computing expenditures per patient under treatment.

Notes: Effective July 1, 1961, two of the facilities in Ohio (formerly classified as state hospitals for the mentally ill) were designated as public institutions for the mentally ill patients in these two facilities (i.e., a total of 10,000 average daily resident patients) were reported and are included in the above table. However, personnel and financial data corresponding to these mentally ill patients are not available. In addition, one other facility classified as a mental hospital has mentally ill and mentally retarded patients. For this facility only the number of mentally ill patients was reported, thus excluding the number of mentally retarded patients. However, the personnel and financial data reported pertained to all patients in the hospital.

13/Oklahoma: The 1961 Provisional Survey data were used as estimates of the maintenance expenditures for Oklahoma.

14/West Virginia: 1960 and 1961 data were used as a basis for estimating 1962 data for one hospital. The admission categories for another hospital were pro-rated on the basis of the admission data from the three remaining hospitals.

Symbol used: \* Indicates data which are estimates or include estimates.

NOTE: Refer to Table 3 for state mental hospital data excluding the psychopathic hospital data for the following states: California, Colorado, Delaware, Indiana, Iowa, Massachusetts, Michigan, Nebraska, New York, Pennsylvania, Tennessee, Texas and Wisconsin.

TABLE 3

AUXILIARY TABLE CONTAINING DATA FOR PUBLIC MENTAL HOSPITALS <sup>1/</sup>  
EXCLUDING PSYCHOPATHIC HOSPITALS FOR THOSE STATES WHICH HAVE PSYCHOPATHIC HOSPITALS

State	Number of Hospitals		PATIENT MOVEMENT DATA							
			Resident Patients Beginning of Year	Admissions (excluding transfers)			Net Releases <sup>3/</sup> Alive from Hospital	Deaths in Hospital	Resident Patients End of Year	Average Daily Resident Patient Population
				Total	No Prior Psychiatric Inpatient Experience	All Other				
1961 DATA <sup>4/</sup>										
United States	275		555,793	247,672	B/	B/	210,540	46,808	526,317	530,517
California	10		36,558	23,790	10,630	13,160	21,816	2,732	35,780	35,547
Colorado	1		5,810	1,754	(758)	(996)	1,311	545	5,708	5,865
Delaware	1		1,475	651	(432)	(219)	505	144	1,477	1,450
Indiana	8		11,555	4,326	2,290	2,056	5,212	1,044	11,625	11,618
Iowa	5		4,115	3,242	(1,316)	(1,366)	3,361	423	3,373	3,622
Massachusetts	12		20,525	10,135	(6,126)	(4,009)	8,973	2,002	19,685	20,132
Michigan <sup>5/</sup>	10		21,429	6,326	2,554	3,772	5,286	1,217	21,232	21,369
Nebraska	3		3,823	1,884	860	1,024	1,580	350	3,777	3,764
New York	21		91,802	27,811	7,573	20,438	21,038	5,506	90,069	90,822
Pennsylvania	17		38,561	9,207	5,335	5,672	6,681	5,138	37,940	38,335
Tennessee	4		7,922	5,109	2,408	2,611	4,471	674	7,886	7,863
Wisconsin	41		14,990	7,273	3,885	3,390	5,732	1,420	15,111	15,043
1962 DATA <sup>6/</sup>										
United States	270		524,436	264,363	128,855	135,528	224,734	49,498	514,567	519,742
California	10		35,780	24,551	10,714	13,837	22,077	2,723	35,531	34,745
Colorado	1		5,708	1,723	831	892	1,613	668	4,950	5,283
Delaware	1		1,477	619	573	246	640	186	1,470	1,450
Indiana	8		11,625	4,315	2,166	2,149	5,659	995	11,286	11,541
Iowa	5		3,373	3,073	1,494	2,079	3,453	335	3,558	3,537
Massachusetts	12		19,685	10,765	6,888	3,877	9,354	1,990	19,106	19,658
Michigan <sup>5/</sup>	9		21,232	6,656	2,677*	3,949*	5,379	1,270	21,029	21,250
Nebraska	3		3,777	2,002	956	1,046	1,715	375	3,669	3,730
New York	21		90,069	28,671	7,000	21,671	20,212	6,978	89,550	89,692
Pennsylvania	17		37,940	10,502	6,106	4,196	7,503	5,618	37,330	37,712
Tennessee	4		7,886	5,450	2,542	2,888	4,636	759	7,821	7,878
Texas	8		15,952	10,107	6,063	5,444	10,457	1,659	15,363	15,805
Wisconsin	41		15,111	7,333	3,911	3,422	6,787	1,517	14,140	14,766

<sup>3/</sup> Refer to Table 1 for footnotes pertinent to the above 1961 data.

<sup>5/</sup> Refer to Table 2 for footnotes pertinent to the above 1962 data.



TABLE 3 (Continued)

AUXILIARY TABLE CONTAINING DATA FOR PUBLIC MENTAL HOSPITALS <sup>1/</sup>  
EXCLUDING PSYCHO-PATHIC HOSPITALS FOR THOSE STATES WHICH HAVE PSYCHO-PATHIC HOSPITALS

State	PATIENT MOVEMENT RATIOS						PERSONNEL AND FINANCIAL DATA			
	Per 100,000 Civilian Population <sup>2/</sup>		Per 1,000 Average Resident Patients <sup>3/</sup>			Net Releases per 1,000 Total Admissions	Total Full-time Personnel End of Year	Maintenance Expenditures		
	Total Admissions	Average Daily Resident Patient Population	Total Admissions	Net Releases Alive From Hospital	Deaths in Hospital			Total Amount	Per Resident Patient <sup>5/</sup>	Per Patient Under Treatment <sup>7/</sup>
1961 DATA <sup>a</sup>										
United States	156.7	292.8	466.4	396.1	88.1	849.3	185,802	\$859,350,030	\$1,809.08	\$1,224.79
Alabama	147.9	221.0	657.7	605.2	76.1	917.0	12,802	79,799,419	2,244.90	1,322.32
Alaska	96.7	325.5	504.6	227.6	94.6	747.4	2,149	11,258,738	1,919.65	1,468.46
Arizona	144.0	320.8	441.1	342.1	97.6	775.7	573	2,536,415	1,749.25	1,193.05
Arkansas	92.4	248.0	373.3	277.1	90.1	742.5	4,436	20,550,604	1,768.86	1,294.04
California	117.1	138.0	845.4	874.3	110.0	1,056.7	2,034	9,767,706	2,555.65	1,327.68
Colorado	199.1	395.5	504.1	446.3	99.6	885.3	8,177	46,262,845	2,297.98	1,508.90
Connecticut	79.9	270.0	296.4	247.7	57.0	855.6	6,745*	42,773,654	2,001.67	1,541.12
Delaware	130.4	260.5	495.8	415.8	92.1	836.6	1,888	8,927,027	2,132.58	1,406.52
District of Columbia	162.3	530.1	305.8	231.3	93.5	756.5	32,084	175,687,039	1,912.39	1,432.07
Florida	81.2	336.1	240.7	174.6	82.0	725.6	12,550	59,946,328	1,565.75	1,254.95
Georgia	142.9	219.9	646.4	565.7	85.3	875.1	1,725	7,906,933	1,005.59	606.76
Hawaii	180.2	372.8	483.2	380.8	94.3	788.1	4,628	27,845,740	1,851.08	1,250.76
1962 DATA <sup>b</sup>										
United States	143.9	282.9	508.9	432.6	95.3	850.1	185,414	\$1,013,777,184*	\$1,951.58*	\$1,285.69*
Alabama	147.4	208.6	688.6	619.2	76.4	899.2	12,969	87,920,144	2,550.44	1,457.30
Alaska	92.3	288.5	323.3	340.2	125.4	1,032.2	2,322	12,518,361	2,899.84	1,738.44
Arizona	177.7	314.5	535.6	434.2	106.2	781.4	581	2,979,418	2,054.77	1,297.66
Arkansas	91.7	245.4	376.7	319.4	86.9	848.0	4,733	21,479,782	1,861.17	1,347.54
California	128.8	128.2	1,050.9	996.2	96.7	966.4	2,058	9,982,805	2,806.52	1,396.98
Colorado	210.7	384.7	555.0	482.3	102.6	868.9	8,545	47,475,885	2,414.99	1,559.08
Connecticut	83.2	266.7	315.4	263.9	60.1	842.0	6,556	44,695,102	2,112.71	1,610.41
Delaware	136.7	254.6	536.3	459.4	100.5	836.6	1,933	8,086,939	2,170.76	1,401.10
District of Columbia	165.3	517.1	319.2	225.1	100.0	705.0	32,271	181,000,000	2,018.02	1,524.34
Florida	90.7	332.1	273.7	194.0	96.1	708.9	12,654	72,299,667	1,917.15	1,406.41
Georgia	150.6	218.5	687.0	586.5	96.0	855.8	1,777	8,735,562	1,108.86	656.02
Hawaii	122.0	199.2	758.7	655.3	102.7	863.7	5,235	22,465,967	1,422.89	801.58
Idaho	179.4	361.2	501.4	464.0	103.7	925.5	4,795	29,633,029	1,940.47	1,276.65

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# MENTAL HEALTH STATISTICS

## *Current Reports*

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

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### PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA STATE AND COUNTY MENTAL HOSPITALS UNITED STATES

1963

#### I. PURPOSE

At the national, state, and local levels, because of the increased emphasis on the area of mental illness, there have arisen pressing requests, from members of Congress, State Legislatures, project planners, and other interested persons, for current data—data which are necessary to plan for facilities and services, research and training, legislation and financing. In an effort to provide current data, these survey statistics for certain patient movement and administrative categories are collected and published annually, by state, for the state and county mental hospitals.

Prior to 1963, the state and county mental hospitals were termed "public mental hospitals" and included "psychopathic" (short term intensive treatment hospitals operated by the state) and "public prolonged-care" (state and county operated) mental hospitals. As the functions of the psychopathic hospitals are also performed in many of the intensive treatment units of other state mental hospitals, the Model Reporting Area states recommended that the distinction between "psychopathic hospitals" and "state mental hospitals" no longer be made, and that the data for these hospitals be combined, thus eliminating the terms "psychopathic" and "public prolonged-care". Beginning with this 1963 report, the "public mental hospitals" will be referred to as "state and county mental hospitals", to make it clear that other public facilities such as Veterans Administration hospitals, military hospitals, Public Health Service hospitals and territorial hospitals are not included.

Certain trend data for the United States, covering the period 1956 through 1963 may

be found in Table A. A graph depicts trends for some of the patient movement categories from 1946 through 1963. The data, by state for the current year, fiscal 1963, are found in Table 1. These data were obtained from the 1963 "Preliminary Survey of State and County Mental Hospitals". As these data are provisional, they are subject to some change. Data in greater detail—first admissions and resident patients by age, sex and mental disorder; personnel by occupation; maintenance expenditure by type—will appear in future publications in the series, *Patients in Mental Institutions*, Part II (NIMH, U. S. PHS). Data for patients in the private mental hospitals, data for the psychiatric patients in general hospitals, and for patients in the public and private institutions for the mentally retarded will be available in other parts of the series. Data for patients resident in Veterans Administration hospitals and for patients served by psychiatric outpatient clinics will be available in separate publications prepared by the Biometrics Branch of the National Institute of Mental Health.

#### II. DESCRIPTION AND LIMITATIONS OF THE DATA

##### A. Patient Movement Data

The summary data presented in this report may be used to analyze the annual changes in year end populations of the state and county mental hospitals in terms of three categories of patient movement (admissions, net releases and deaths). These categories are defined as follows:

1. Admissions: This category includes three admission classifications. Admissions With No Prior Psychiatric

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Inpatient Experience includes patients admitted to hospitals with no record of prior admission to any inpatient psychiatric facility either within or outside the state system. The state system is defined to include state and county mental hospitals and public institutions for the mentally retarded. This category replaces the former classification, first admissions, which was defined as "a patient who has not previously been admitted to a public or nonpublic hospital authorized for the treatment of mental disorders." The major difference between these two definitions lies in the area of psychiatric services in general hospitals. In using the first admission definition, some states did not consider prior psychiatric treatment in a general hospital as constituting a previous psychiatric admission. Under the present definition such cases are considered as having a prior admission to an inpatient psychiatric facility. Therefore, the number of admissions with no prior inpatient psychiatric experience will either be less than or equal to the number of first admissions (old definition). Admissions With Prior Admission to Hospitals in Same State System are patients admitted to the hospital with a history of prior admission to a public mental hospital or a public institution for mentally retarded in the same state. All Other Admissions include patients admitted to the hospital with prior admission to other inpatient psychiatric facilities—state psychiatric facilities in other states, Veterans Administration hospitals, private mental hospitals, private institutions for the mentally retarded, and any other inpatient psychiatric facilities (including psychiatric services in general hospitals) which are medical facilities accepting patients for screening and/or treatment of psychiatric disorders.

2. Net Releases Alive from Hospital The concept of "net release alive from hospital" takes into account movement of patients into and out of the hospital since this quantity is the number of placements on extramural care plus direct discharges from the hospital less the number of returns from extramural care, all occurring during any one year. National data on placements and returns from extramural care are not available but net releases may be computed from less detailed movement data as:

$$\left[ \begin{array}{c} \text{Net} \\ \text{Releases} \\ \text{Alive from} \\ \text{Hospital} \end{array} \right] = \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{Beginning} \\ \text{of Year} \end{array} \right] + \left[ \begin{array}{c} \text{All Admis-} \\ \text{sions} \\ \text{excluding} \\ \text{Transfers} \end{array} \right] - \left[ \begin{array}{c} \text{Deaths} \\ \text{in} \\ \text{Hospital} \end{array} \right] - \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{End of} \\ \text{Year} \end{array} \right]$$

Interpretation of net releases alive from hospital should be made with caution. This quantity is the net number of releases alive from the state hospital system and includes not only direct discharges to the community and placement on leave but also direct discharges to other inpatient facilities outside the state system such as Veterans Administration hospitals, nursing homes, boarding care homes, and mental hospitals in other states. The number of net releases is used as a measure of movement out of the hospital rather than the total number of discharges because many discharges occur while patients are already outside the hospital on extramural care. The number of net releases may be considered an estimate of the number of effective releases from the hospital under the assumption that subtracting returns from leave during the year removes only the short term visits, leaves, and escapes and retains the effective releases; i.e., those from which the patients did not return to the hospital within the time period covered.

3. Deaths in Hospital This category includes only deaths occurring to patients resident in the hospital and does not include deaths among patients on leave even though these patients are still on the hospital books.

4. Patient Movement Ratios per 100,000 Civilian Population The admission ratio measures the proportion of people coming under care during the year while the average daily resident patient ratio measures the average proportion of the population under care at any one time during the year.

5. Patient Movement Ratios per 1,000 Average Resident Patients These ratios relate the average resident population to three movement categories: Total admissions, Net releases and Deaths, thus providing indexes of the amount and type of patient movement activity that occurred during the year. It should be kept in mind that the ratios shown in this publication are based on totals and as such they have the limitations of totals since they are not standardized for such important variables as age, sex, diagnosis, and years of hospitalization. To illustrate how these ratios are descriptive of changes in resident patient populations, consider the following hypothetical example: Suppose that the resident patient populations in State A and State B each decreased by 0.6 percent (or 6 per 1,000).



Considering only these data gives a limited and potentially misleading view of patient movement activity. However, now suppose that the patient movement ratios are computed to be the following:

Movement Category	State A	State B
Admissions	323.7	522.2
Net Releases	229.5	454.8
Deaths	99.9	73.5

These ratios show that State B has much higher rates of patient movement into and out of the hospital than State A. While these ratios highlight areas of difference between the two states, conclusions based only on these ratios may be fallacious. The differences can be isolated further by analyzing the data in terms of the patient characteristics mentioned above (age, sex, diagnosis, and years of hospitalization). Even at this point, one cannot evaluate the relative efficacy of the two state mental hospital programs since differences in patient movement ratios between states may also be attributable to a great many other factors, such as policies and laws controlling admissions and release, the ways in which the mental hospitals are utilized by the communities they serve, the types of patients admitted, the various treatment programs within the hospitals, and the availability of various community facilities that can serve as adjuncts or alternatives to hospitalization. Since the reasons for interstate differences in these movement ratios are complex and vary considerably from hospital to hospital within and between states, ratios constructed from gross movement data (i.e. state totals) can not be used to measure the therapeutic effectiveness of various hospital programs.

6. Ratio of Net Releases to 1,000 Admissions Another approach to the problem of analyzing patient movement data is given by relating net releases to admissions (a group with a high probability of release). Preliminary data obtained from 14 Model Reporting Area states indicated that 85 percent of the net releases in a given year occurred to patients whose length of hospital stay was less than one year (i.e. largely admissions during the year). The remaining 15 percent of net releases occurred to patients with lengths of stay greater than one year, that is, patients admitted during some prior year. Thus, exclusion of these patients from the denominator limits the usefulness of this ratio.

## B. Expenditure Ratios

The expenditure per average daily resident patient has been the most commonly used ratio for comparing mental hospital expenditures. Its major limitation is that it does not adequately take into account the number of admissions for which a large share of the expenditure is required. The ratio of expenditures to "patients under treatment" does take into account the admissions during the year. The actual number of patients under treatment during the year is equal to the number of resident patients at the beginning of the year plus all admissions during the year and all returns from extramural care among patients on extramural care at the beginning of the year. Since this latter category of data is not available nationally, the number of resident patients at the beginning of the year plus all admissions (excluding transfers) has been used as the best available estimate of "patients under treatment."

It should be pointed out that these figures do not represent expenditures by state agencies alone inasmuch as county expenditures for the care of patients in the mental hospitals are included for Maryland, Michigan, New Jersey, Tennessee and Wisconsin, the only states with county mental hospitals. These costs have been included for greater comparability among states in expenditures per patient.

## C. Interstate Variation

Considerable variation among states in patient movement, personnel, and expenditure data is indicated in Table 1.

Actual numbers are not comparable among states since they do not take into account differences in size of population. Therefore, ratios have been computed for several data categories.

However, as has been emphasized in Sections A4-A6, meaningful interstate comparisons cannot be made without more detailed breakdowns of movement categories by such variables as age, sex, diagnosis, and time on books. Data on most of these variables as well as more detail on personnel and maintenance expenditures will be available in Patients in Mental Institutions (NIMH, U.S. PHS). This detail will provide partial explanations of the gross differences noted in the above tables. Also, as mentioned previously, other factors such as policies and laws affecting admission and release of patients, other community treatment facilities, effectiveness of therapeutic

programs, etc., must be evaluated to determine the extent of their influence on interstate variation.

### III. TRENDS

For the 8th consecutive year, the RESIDENT PATIENT POPULATION decreased in the State and county mental hospitals. A decrease occurred in 40 states (including the District of Columbia). The 1963 figure of 504,947 resident patients represents a percent decrease of 2.1 from the 1962 figure of 515,700 patients. Since the downward trend began in 1956, (there were 558,922 resident patients at the end of 1955) there has been a reduction in this population of 53,975 or 9.7 percent (or an average of 1.2 percent per year). The greatest percent change (2.2 percent) occurred between 1961 and 1962.

The current year, 1963, shows a continuation of the upward trend in TOTAL ADMISSIONS which began in the mid-1940's. The total admissions rose from 267,068 in 1962 to 285,244 in 1963—an increase of 18,176 patients or 6.8 percent. Forty-one states showed increases in the number of admissions.

The number of NET RELEASES, also, has been rising since the mid-1940's. From 1955 to 1963 the number almost doubled—from 126,498 net releases to 247,228.

DEATHS, with the exception of a drop in 1961, have shown little variation over the last five years. The 1963 figure of 49,039 was a decrease of only 528 patients from the 1962 number.

In 1955 there were 146,392 full-time PERSONNEL—a ratio of 3.8 resident patients per full-time employee. The number of personnel has steadily risen over the years, reaching a total of 194,516 in 1963—

a ratio of 2.6 resident patients per full-time employee. The MAINTENANCE EXPENDITURES has also continued to climb during this interval—from \$618,087,247 (\$3.06 per resident patient per day) in 1955 to \$1,084,713,981 (\$5.81 per resident patient per day) in 1963. The 1963 ratios varied among states ranging from \$2.84 to \$19.05.

Trends, since 1955, in the data given in this report are indicated numerically in Table A. Also shown are the same data expressed as index numbers where 1955 is the base year. Thus, percent change since 1955 can be read directly from Table A with increases being numbers greater than 100 and decreases being numbers less than 100. For instance the 1958 index number for admissions is 117.9. This means that admissions in that year were 17.9 percent greater than 1955 admissions. An index number is computed by dividing each of the observed numbers by the corresponding number in the base time period for each movement and administrative data category. The year 1955 was selected as the base year primarily because the number of resident patients reached its maximum during that year. Also, the admission, net release, and death data were not atypical during 1955. Percentage change between the data for any two years other than 1955 may be computed by obtaining the difference between the two index numbers concerned and dividing this difference by the index number for the earlier year. For example, the index numbers for net releases in 1959 and 1960 are 139.5 and 151.3. The percent change between 1959 and 1960 is given by:

$$\frac{151.3 - 139.5}{139.5} = \frac{11.8}{139.5} = 8.46$$

Therefore, there was an 8.5 percent increase in net release between 1959 and 1960.

NUMBER OF RESIDENT PATIENTS, TOTAL  
ADMISSIONS, NET RELEASES, AND DEATHS,  
STATE AND COUNTY MENTAL HOSPITALS  
UNITED STATES, 1939-'63

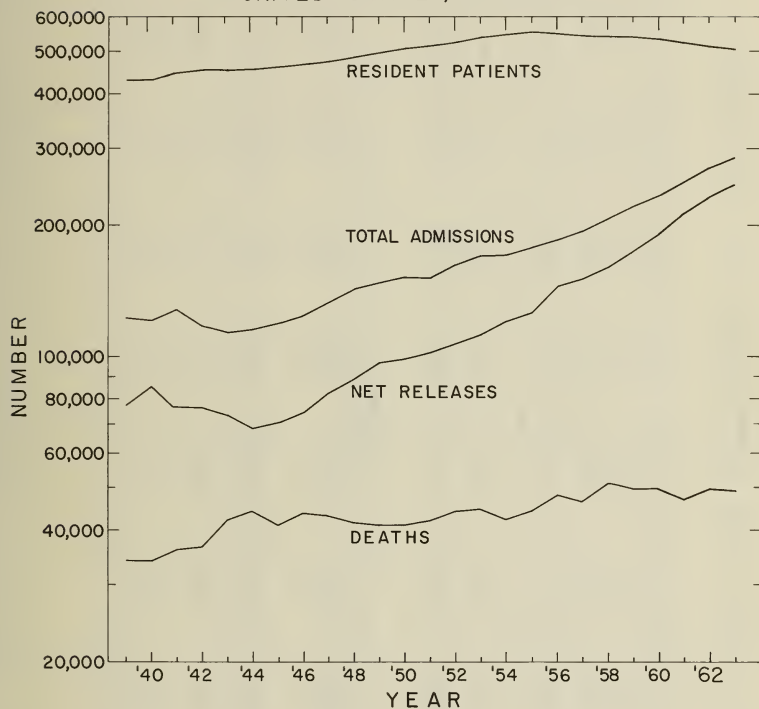


TABLE A  
RECENT TRENDS OF PATIENT MOVEMENT AND ADMINISTRATIVE DATA, STATE AND COUNTY MENTAL HOSPITALS  
UNITED STATES, 1955-1963

ITEM	1955	1956	1957	1958	1959	1960	1961	1962	1963
All Admissions	178,003	185,597	194,497	209,823	222,791	234,846	253,005	267,068	285,244
Net Releases	126,498	145,313	150,413	161,894	176,411	191,415	213,680	227,369	247,228
Deaths in Hospital	44,384	48,236	46,848	51,383	49,647	49,751	49,591	49,567	49,059
Resident Patients End of Year	558,922	551,390	546,826	545,182	541,883	535,796	527,555	515,700	504,947
Personnel (full time) at End of Year	146,392	153,499	162,753	169,438	174,635	181,957	187,051	191,676	194,516
Maintenance Expenditures Per Resident Patient	\$618,087,247	\$662,994,142	\$731,875,462	\$805,861,786	\$849,493,595	\$916,482,804	\$974,838,616	\$1,029,976,737	\$1,084,713,981
Per Year	1,116.59	1,195.01	1,332.31	1,475.26	1,567.39	1,701.21	1,833.88	1,990.64	2,119.79
Per Day	3.06	3.27	3.65	4.04	4.29	4.65	5.02	5.45	5.81
Per Patient Under Treatment	849.31	890.47	981.21	1,063.38	1,106.43	1,179.57	1,234.24	1,299.43	1,353.84
Per Year	2.33	2.43	2.69	2.91	3.03	3.22	3.38	3.56	3.71

INDEX NUMBERS

All Admissions	100.0	104.3	109.3	117.9	125.2	131.9	142.1	150.0	160.2
Net Releases	100.0	114.9	118.9	128.0	139.5	151.3	170.4	179.7	195.4
Deaths in Hospital	100.0	108.7	105.6	115.8	111.9	112.1	105.6	111.7	110.5
Resident Patients End of Year	100.0	98.7	98.2	97.5	97.0	95.9	94.4	92.3	90.3
Personnel (full time) at End of Year	100.0	104.9	111.2	115.7	119.3	124.3	127.8	130.9	132.9
Maintenance Expenditures Per Resident Patient	100.0	107.3	116.4	130.4	137.4	146.3	157.7	166.6	175.5
Per Year	100.0	107.0	119.3	132.1	140.4	152.4	164.2	178.3	189.8
Per Day	100.0	106.9	119.3	132.0	140.2	152.0	164.1	178.1	189.9
Per Patient Under Treatment	100.0	104.8	115.5	125.2	130.3	138.9	145.3	153.0	159.4
Per Year	100.0	104.3	115.5	124.9	130.0	138.2	145.1	152.8	159.2

1/ 1955-1962 data from Patients in Mental Institutions. These data include estimates for under-reporting wherever possible. 1963 data from the Provisional Survey of Public Mental Hospital.



TABLE 1

PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1963 <sup>1/</sup>  
 STATE AND COUNTY MENTAL HOSPITALS

State	Number of Hospitals	PATIENT MOVEMENT DATA						
		Resident Patients Beginning of Year	Admissions (excluding transfers)				Net Releases Alive From Hospital	Deaths in Hospital
			Total	No Prior Psychiatric Inpatient Experience	With Prior Admission to Hospitals in Same System	All Other		
United States	285	515,970	285,244 <sup>3/</sup>	130,025 <sup>3/</sup>	97,315 <sup>3/</sup>	52,025 <sup>3/</sup>	247,228	49,039
Alabama	2	7,568	3,795	2,393	1,338	64	3,190	626
Alaska	2	293	162	91	52	19	154	5
Arizona	1	1,750	1,647	867	469	311	1,458	215
Arkansas	1	4,250	3,216	1,753	895	568	3,523	405
California	12	35,895 <sup>4/</sup>	26,446	8,261*	9,186*	8,999*	24,533	2,685
Colorado	2	5,010	3,045	1,920*	931*	194*	3,303	521
Connecticut	3	8,242*	7,664*	3,617*	3,197*	850*	6,427*	1,094*
Delaware	2	1,703	1,143	765	15	363	975	185
District of Columbia	1	6,894	1,930	276*	585*	1,069*	1,650	496
Florida	4	9,806	4,370	1,524	956	1,890	3,465	869
Georgia	1	12,035	6,053	4,804	1,048	201	4,925	1,149
Hawaii	1	1,087	456	121	172	163	437	70
Idaho	2	916	847	425	308	114	797	99
Illinois	13	35,007 <sup>4/</sup>	16,934*	5,434*	7,321*	4,179*	13,867*	3,632*
Indiana	9	11,457	4,502	2,297	1,402	803	3,796	958
Iowa	6	3,393	4,425	1,987	1,638	800	4,385	365
Kansas	3	3,179	2,608	1,511	833	264	2,583	238
Kentucky	4	5,859	4,978	2,224	1,851	903	4,776	608
Louisiana	3	7,593	5,614	2,759*	1,968*	887*	5,701*	507*
Maine	2	2,851	1,627	1,047	496*	84*	1,515	325
Maryland <sup>4/</sup>	6	8,567	7,143	4,192	2,666*	283*	6,258	966
Massachusetts	13	19,225	12,199*	6,220*	5,656*	121*	10,946*	2,004
Michigan	10	21,125	7,614	3,287*	2,465*	1,864*	7,217	1,165
Minnesota	7	8,423	5,546*	2,459*	2,554*	733*	5,471*	749*
Mississippi <sup>5/</sup>	2	5,306	3,927	---	---	---	3,474	348
Missouri	5	10,990	3,751	1,833	914	1,004	3,076	851
Montana	1	1,624	1,419	818	440	161	1,290	166
Nebraska	4	3,768	2,555	1,237	1,001	317	2,184	380
Nevada	1	575	403	231	81	91	371	57
New Hampshire	1	2,467	1,422	647	441	334	1,133	291
New Jersey	12	21,150	10,707*	6,549*	3,523*	635*	8,436*	2,727
New Mexico	1	985	1,008	642	309	57	867	103
New York	22	89,610	31,884	8,608*	11,347*	11,929*	23,169	9,484
North Carolina	4	9,733	9,257	5,137	3,339	781	8,119	994
North Dakota	1	1,712	1,407	952	5	450	1,417	139
Ohio <sup>6/</sup>	20	23,503	16,746	8,294	8,090*	362*	15,514	2,088
Oklahoma	4	6,495	3,535	1,863	1,044	628	3,138	559
Oregon	3	4,143	3,722	1,943	1,337	442	3,677	487
Pennsylvania	19	37,478 <sup>4/</sup>	10,560	5,760	1,377	3,223	7,420	3,213
Rhode Island <sup>7/</sup>	1	3,357	1,952	---	---	---	1,541	452
South Carolina	1	6,697	3,514	2,450	956	108	2,956	597
South Dakota	1	1,513	1,448	835	600	13	1,154	188
Tennessee	6	8,065	6,419	2,922	2,628	869	5,558	750
Texas	9	15,888	13,070	7,013	4,615	1,442	11,515	1,534
Utah	1	837	874	362	314	198	1,011	87
Vermont	1	1,208	679	413	266	0	535	132
Virginia	4	11,536	5,389	2,862	1,695	832	4,382	1,091
Washington	3	5,184	3,444	1,650*	1,244*	550*	3,456	492
West Virginia	5	5,217	3,949	1,838	845	1,266	3,460	481
Wisconsin	42	14,171	7,876	4,575	2,761	542	6,757	1,370
Wyoming	1	630	563	359	139	65	466	44

NOTE: Refer to page 10 for footnotes.

TABLE 1 (Continued)  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1963 <sup>1/</sup>  
STATE AND COUNTY MENTAL HOSPITALS

State	Resident Patients End of Year	Average Daily Resident Patient Population	Total Full-time Personnel End of Year	PERSONNEL AND FINANCIAL DATA		
				Maintenance Expenditures		
				Total Amount	Per Resident Patient 8/	Per Patient Under Treatment 9/
United States	504,947	511,708	194,516	\$1,084,713,981	\$2,119.79	\$1,353.84
Alabama	7,547	7,557	1,955	9,522,080	1,260.03	837.99
Alaska	296	304	350	2,113,999	6,953.94	4,646.15
Arizona	1,724	1,726	661	3,883,366	2,249.93	1,143.18
Arkansas	3,538	3,867	1,531	6,658,409	1,721.85	891.83
California	35,125	35,510*	13,733	100,093,659	2,818.75*	1,605.58
Colorado	4,231	4,678	2,917	16,513,880	3,530.12	2,050.14
Connecticut	8,385*	8,314*	3,601*	21,535,482*	2,590.27*	1,553.92*
Delaware	1,686	1,692	821*	3,625,853*	2,142.95*	1,274.01*
District of Columbia	6,878	6,798	3,890	25,107,713	3,693.40	2,845.39
Florida	9,822	9,821	4,192	17,094,283	1,740.58	1,205.86
Georgia	12,014	11,878	2,688	14,080,699	1,185.44	778.46
Hawaii	1,036	1,060	395	2,841,416	2,680.58	1,841.49
Idaho	867	879	456	2,508,842	2,854.20	1,423.05
Illinois	34,442*	34,965*	11,713*	66,554,942*	1,903.47*	1,281.36*
Indiana	11,205	11,392	5,175	24,440,932	2,145.45	1,531.48
Iowa	3,068	3,302	2,169	11,082,980*	3,356.44*	1,417.62*
Kansas	2,966	3,086	2,246	12,164,683	3,941.89	2,102.07
Kentucky	5,453	5,688	2,123*	11,145,496*	1,959.48*	1,028.47*
Louisiana	6,999*	7,396	2,706	11,669,276	1,577.78	883.57
Maine	2,838	2,901	1,044	5,320,091	1,833.88	1,188.05
Maryland	8,506	8,420	3,470	18,895,883	2,244.17	1,202.79
Massachusetts	18,474	19,007	8,612	46,732,744*	2,458.71*	1,487.17*
Michigan	20,357	20,900	6,666*	49,737,377*	2,379.78*	1,730.66*
Minnesota	7,749	8,138	2,977*	19,036,651	2,339.23	1,362.78*
Mississippi	5,411	5,329	1,777	5,531,252	1,037.95	599.07
Missouri	10,814	10,847	4,612	21,167,568	1,951.47	1,435.97
Montana	1,587	1,600	578	3,235,289	2,022.06	1,063.19
Nebraska	3,759	3,811	2,231*	9,442,328	2,477.65	1,493.33
Nevada	550	557	190	1,391,065	2,497.46	1,422.38
New Hampshire	2,465	2,512	985	5,095,725	2,028.55	1,310.29
New Jersey	20,694	21,199	8,926*	45,526,976	2,147.60	1,429.10*
New Mexico	1,023	1,011	425	2,083,214	2,060.55	1,045.27
New York	88,841	89,027	33,169	200,743,834	2,254.86	1,652.29
North Carolina	9,877	9,810	3,437	18,044,399	1,839.39	950.21
North Dakota	1,563	1,632	587	3,531,484	2,163.90	1,132.25
Ohio <sup>6/</sup>	22,647	23,286	8,478	45,222,680*	1,942.05*	1,123.57*
Oklahoma	6,333	6,410	2,476*	9,895,966*	1,543.85*	986.64*
Oregon	3,701	3,974	1,657	9,617,155	2,420.02	1,222.78
Pennsylvania	37,205	37,517	13,753	74,458,459	1,984.15	1,556.05
Rhode Island	3,316	3,362	1,460	7,690,869*	2,287.59*	1,448.65*
South Carolina	6,658	6,580	1,848	8,214,138	1,248.35	804.44
South Dakota	1,619	1,535	684	2,833,294	1,845.79	956.87
Tennessee	8,176	8,150	2,215	9,553,827*	1,172.25*	659.61*
Texas	15,909	15,853	5,563	24,511,998	1,546.21	846.47
Utah	613	723	475	2,506,471	3,466.76	1,464.92
Vermont	1,220	1,240	499	2,701,410	2,178.56	1,431.59
Virginia	11,452	11,561	3,627	16,309,911	1,410.77	963.66
Washington	4,680	4,984	2,331	14,540,577	2,917.45	1,685.28
West Virginia	5,225	5,223	1,341	6,332,584	1,212.44	690.88
Wisconsin	13,920	14,026	4,849	30,824,730	2,197.69	1,398.14
Wyoming	683	670	272	1,366,022	2,038.84	1,145.03

NOTE: Refer to page 10 for footnotes.

TABLE 1 (Continued)  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1965 <sup>1/</sup>  
STATE AND COUNTY MENTAL HOSPITALS

State	PATIENT MOVEMENT RATIOS					Net Releases per 1,000 Total Admissions
	Per 100,000 Civilian Population <sup>10/</sup>		Per 1,000 Average Resident Patients <sup>11/</sup>			
	Total Admissions	Average Daily Resident Patient Population	Total Admissions	Net Releases Alive from Hospital	Deaths in Hospital	
United States	152.9	274.3	558.8	484.3	96.1	866.7
Alabama	114.2	227.4	502.1	422.1	82.8	840.6
Alaska	75.3	141.4	549.2	522.0	16.9	950.6
Arizona	107.0	112.2	948.2	839.4	123.8	885.2
Arkansas	174.4	209.7	825.9	904.7	104.0	1,095.5
California	153.0	205.5*	744.7	690.9	75.6	927.7
Colorado	160.0	245.8	658.9	714.8	112.7	1,084.7
Connecticut	288.7*	313.1*	921.8*	773.0*	131.6*	838.6*
Delaware	244.8	362.3	674.3	575.2	109.1	853.0
District of Columbia <sup>12/</sup>	201.1	691.0	284.4	243.1	73.1	854.9
Florida	78.7	176.8	445.3	355.1	88.5	797.5
Georgia	149.4	293.2	503.4	409.6	95.6	813.6
Hawaii	72.4	168.3	429.4	411.5	65.9	958.3
Idaho	120.0	124.5	949.6	893.5	111.0	941.0
Illinois	167.1*	345.1*	487.7*	399.3*	104.6*	818.9*
Indiana	96.1	243.2	597.3	535.0	84.5	845.2
Iowa	159.3	118.9	1,369.5	1,357.2	113.0	991.0
Kansas	119.3	141.1	848.7	840.5	77.4	990.4
Kentucky	163.0	186.2	880.1	844.4	107.5	959.4
Louisiana	165.9	218.6	769.5*	781.4*	69.5*	1,015.5*
Maine	169.0	301.2	571.9	462.2	114.2	808.2
Maryland	221.4	260.9	836.7	730.7	113.2	873.3
Massachusetts	235.7*	367.3	647.2*	580.7*	106.3	897.3*
Michigan	94.1	258.3	367.1	348.0	56.2	947.9
Minnesota	158.7*	232.9	685.9*	676.6*	92.6*	986.5*
Mississippi	173.6	235.6	732.8	648.3	64.9	884.6
Missouri	87.3	252.4	344.1	282.2	78.1	820.0
Montana	203.6	229.6	885.6	803.2	103.4	909.1
Nebraska	177.2	264.3	678.8	580.2	101.0	854.8
Nevada	111.9	154.7	715.8	659.0	101.2	920.6
New Hampshire	229.4	405.2	576.6	459.4	118.0	796.8
New Jersey	166.7*	330.2	511.8*	403.2*	130.3	787.9*
New Mexico	101.2	101.5	1,004.0	863.5	102.6	860.1
New York	180.5	504.0	357.3	259.7	106.3	726.7
North Carolina	198.3	210.1	944.1	828.0	101.4	877.1
North Dakota	225.8	262.0	859.0	865.1	84.9	1,007.1
Ohio <sup>6/</sup>	164.9	229.4	725.7	672.3	90.5	926.4
Oklahoma	144.2	261.4	551.1	489.2	87.2	887.7
Oregon	204.5	218.4	949.0	937.5	124.2	987.9
Pennsylvania	90.8	329.0	277.4	198.7	86.0	716.2
Rhode Island	227.5	391.8	585.0	461.8	135.5	789.4
South Carolina	145.1	271.7	526.2	442.6	89.4	841.2
South Dakota	198.1	210.0	924.6	736.9	120.1	797.0
Tennessee	175.2	222.4	790.4	684.4	92.4	865.9
Texas	128.9	156.4	822.1	724.3	96.5	881.0
Utah	89.4	73.9	1,205.5	1,394.5	120.0	1,156.8
Vermont	174.1	317.9	559.3	440.7	108.7	787.9
Virginia	128.6	276.0	468.9	381.2	94.9	813.1
Washington	115.1	166.6	698.3	700.7	99.8	1,003.5
West Virginia	222.2	293.9	756.4	662.7	92.1	876.2
Wisconsin	194.2	345.8	560.7	481.1	97.5	857.9
Wyoming	169.1	201.2	856.9	709.3	67.0	827.7

NOTE: Refer to page 10 for footnotes.

1/ These data were taken from the 1963 Provisional Survey of the state and county mental hospitals. Exceptions are given in footnotes.

2/ Net releases are defined as the net number of patients released alive from the hospital in any one year.

3/ Type of admission data were not available, for this table, for 5,879 patients. (See footnotes 5 and 7.) Therefore, for the U.S. total, the number of patients in the three admission categories will not add to the total number of admissions.

4/ Maryland: "Admissions with prior admissions to hospitals in the same state system" and "all other admissions" public mental hospital data from Maryland for the 1962 Census of Patients in Mental Institutions were used as a basis for pro-rating the 1963 total admissions between these two categories.

5/ Mississippi: Type of admission data were not available for one state hospital. Data reported from the other state hospital are as follows:

All Admissions.....	438
No Prior Admission.....	233
With Prior Admission.....	180
All Other.....	25

6/ Ohio: Effective July 1, 1961, two of the facilities in Ohio (formerly classified as state hospitals for mentally ill) were designated as public institutions for the mentally retarded. Mentally ill patients in these two facilities (i.e. a total of 717 average daily resident patients) were reported and are included in the above table. However, personnel and financial data corresponding to these mentally ill patients are not available. In addition, one other facility classified as a mental hospital has mentally ill and mentally retarded patients. For this facility only the number of mentally ill patients was reported, thus excluding the number of mentally retarded patients. However, the personnel and financial data reported pertained to all patients in the hospital.

7/ Rhode Island: Data by type of admission are not available.

8/ Per resident patient maintenance expenditures are based on the average daily resident patient population of hospitals reporting expenditures.

9/ Per patient under treatment maintenance expenditure are based on the sum of resident patients at beginning of year plus all admissions (excluding transfers) for hospitals reporting expenditures.

10/ Admission and average daily resident patient rates are per 100,000 estimated civilian population. Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 273. Provisional estimate for July 1, 1963.

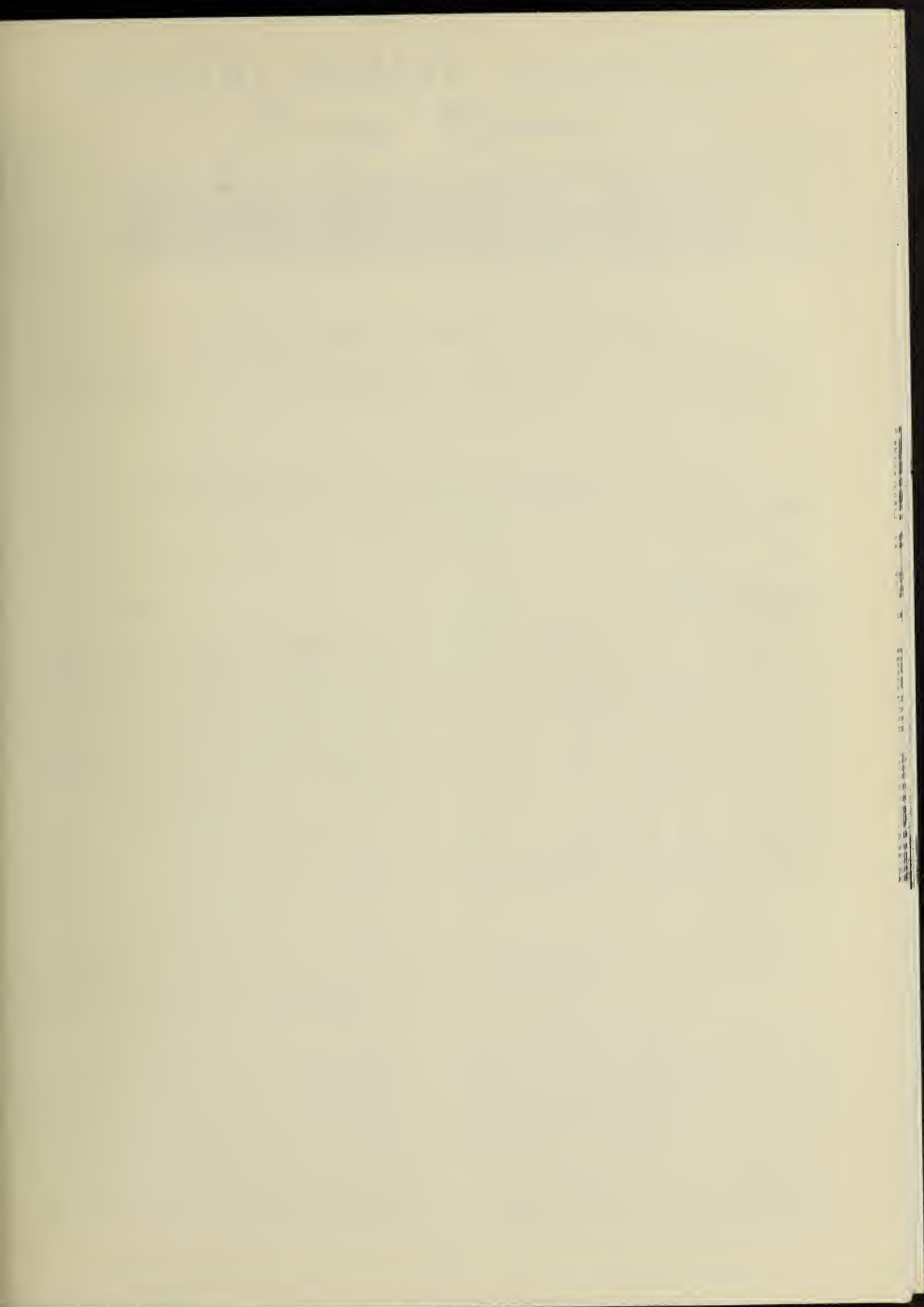
11/ These ratios are based on the average of the beginning and end of year resident patient population.

12/ District of Columbia: Since a substantial proportion of the patients at the St. Elizabeths Hospital are non-residents of the District of Columbia, total admission and resident patient rates per 100,000 population are computed only for residents of the District of Columbia. District residents include 1,583 total admissions and 5,438 average daily resident patients.

Symbols used: \* Indicates data which are estimates or include estimates.

--- Data not available.





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# MENTAL HEALTH STATISTICS

## *Current Reports*

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

National Clearinghouse for Mental Health Information

January 1965

Bethesda, Maryland 20014

Series MHB-H-9

### PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA STATE AND COUNTY MENTAL HOSPITALS UNITED STATES

1964

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#### I. PURPOSE

Since the passage of the National Mental Health Act by Congress in 1946, the National Institute of Mental Health has been responsible for collecting and publishing data on the hospitalized mentally ill in the United States--data necessary to answer requests from members of Congress, State legislators, project planners, hospital administrators and other persons interested in the field of mental illness. These data are extremely useful, for example, in planning for facilities and services, research and training, and legislation and financing. In an effort to provide current data, the provisional survey statistics tabulated in these Mental Health Statistics--Current Reports (Series MHB-H) are collected and published annually for certain patient movement and administrative categories, by state, for the state and county mental hospitals. (Similar data are published for the Public Institutions for the Mentally Retarded in the Series MHB-I)

Certain trend data for the United States, covering the period 1956 through 1964 may be found in Table A. A graph depicts trends for some of the patient movement categories from 1938 through 1964. The data, by state for the current year, fiscal 1964, are found in Table 1. These data were obtained from the 1964 "Preliminary Survey of State and County Mental Hospitals". As these data are provisional, they are subject to some change. Data in greater detail--

admissions with no prior psychiatric in-patient experience and resident patients by age, sex and mental disorder; personnel by occupation; maintenance expenditure by type--will appear in future publications in the series, Patients in Mental Institutions, Part II (NIMH, U.S. PHS). Data for patients in the private mental hospitals, data for the psychiatric patients in general hospitals, and for patients in the public and private institutions for the mentally retarded will be available in other parts of the series. Data for patients resident in Veterans Administration hospitals and for patients served by psychiatric outpatient clinics will be available in separate publications prepared by the Biometrics Branch of the National Institute of Mental Health.

#### II. DESCRIPTION AND LIMITATIONS OF THE DATA

##### A. Patient Movement Data

The summary data presented in this report may be used to analyze the annual changes in year end populations of the state and county mental hospitals in terms of three categories of patient movement (admissions, net releases and deaths). These categories are defined as follows:

1. Admissions: This category includes three admission classifications. Admissions With No Prior Psychiatric

Inpatient Experience includes patients admitted to hospitals with no record of prior admission to any inpatient psychiatric facility either within or outside the state system. The state system is defined to include state and county mental hospitals and public institutions for the mentally retarded. This category replaces the former classification, first admissions, which was defined as "a patient who has not previously been admitted to a public or nonpublic hospital authorized for the treatment of mental disorders." The major difference between these two definitions lies in the area of psychiatric services in general hospitals. In using the first admission definition, some states did not consider prior psychiatric treatment in a general hospital as constituting a previous psychiatric admission. Under the present definition such cases are considered as having a prior admission to an inpatient psychiatric facility. Therefore, the number of admissions with no prior inpatient psychiatric experience will either be less than or equal to the number of first admissions (old definition). Admissions With Prior Admission to Hospitals in Same State System are patients admitted to the hospital with a history of prior admission to a public mental hospital or a public institution for mentally retarded in the same state. All Other Admissions include patients admitted to the hospital with prior admission to other inpatient psychiatric facilities—state psychiatric facilities in other states, Veterans Administration hospitals, private mental hospitals, private institutions for the mentally retarded, and any other inpatient psychiatric facilities (including psychiatric services in general hospitals) which are medical facilities accepting patients for screening and/or treatment of psychiatric disorders.

2. Net Releases Alive from Hospital The concept of "net release alive from hospital" takes into account movement of patients into and out of the hospital since this quantity is the number of placements on extramural care plus direct discharges from the hospital less the number of returns from extramural care, all occurring during any one year. National data on placements and returns from extramural care are not available but net releases may be computed from less detailed movement data as:

$$\left[ \begin{array}{c} \text{Net} \\ \text{Releases} \\ \text{Alive from} \\ \text{Hospital} \end{array} \right] = \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{Beginning} \\ \text{of Year} \end{array} \right] + \left[ \begin{array}{c} \text{All Admissions} \\ \text{excluding} \\ \text{Transfers} \end{array} \right] - \left[ \begin{array}{c} \text{Deaths} \\ \text{in} \\ \text{Hospital} \end{array} \right] - \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{End of} \\ \text{Year} \end{array} \right]$$

Interpretation of net releases alive from hospital should be made with caution. This quantity is the net number of releases alive from the state hospital system and includes not only direct discharges to the community and placement on leave but also direct discharges to other inpatient facilities outside the state system such as Veterans Administration hospitals, nursing homes, boarding care homes, and mental hospitals in other states. The number of net releases is used as a measure of movement out of the hospital rather than the total number of discharges because many discharges occur while patients are already outside the hospital on extramural care. The number of net releases may be considered an estimate of the number of effective releases from the hospital under the assumption that subtracting returns from leave during the year removes only the short term visits, leaves, and escapes and retains the effective releases; i.e., those from which the patients did not return to the hospital within the time period covered.

3. Deaths in Hospital This category includes only deaths occurring to patients resident in the hospital and does not include deaths among patients on leave even though these patients are still on the hospital books.

4. Patient Movement Ratios per 100,000 Civilian Population The admission ratio measures the proportion of people coming under care during the year while the average daily resident patient ratio measures the average proportion of the population under care at any one time during the year.

5. Patient Movement Ratios per 1,000 Average Resident Patients These ratios relate the average resident population to three movement categories: Total admissions, Net releases and Deaths, thus providing indexes of the amount and type of patient movement activity that occurred during the year. It should be kept in mind that the ratios shown in this publication are based on totals and as such they have the limitations of totals since they are not standardized for such important variables as age, sex, diagnosis, and years of hospitalization. To illustrate how these ratios are descriptive of changes in resident patient populations, consider the following hypothetical example: Suppose that the resident patient populations in State A and State B each decreased by 0.6 percent (or 6 per 1,000).



Considering only these data gives a limited and potentially misleading view of patient movement activity. However, now suppose that the patient movement ratios are computed to be the following:

Movement Category	State A	State B
Admissions	323.7	522.2
Net Releases	229.5	454.8
Deaths	99.9	73.5

These ratios show that State B has much higher rates of patient movement into and out of the hospital than State A. While these ratios highlight areas of difference between the two states, conclusions based only on these ratios may be fallacious. The differences can be isolated further by analyzing the data in terms of the patient characteristics mentioned above (age, sex, diagnosis, and years of hospitalization). Even at this point, one cannot evaluate the relative efficacy of the two state mental hospital programs since differences in patient movement ratios between states may also be attributable to a great many other factors, such as policies and laws controlling admissions and release, the ways in which the mental hospitals are utilized by the communities they serve, the types of patients admitted, the various treatment programs within the hospitals, and the availability of various community facilities that can serve as adjuncts or alternatives to hospitalization. Since the reasons for interstate differences in these movement ratios are complex and vary considerably from hospital to hospital within and between states, ratios constructed from gross movement data (i.e. state totals) can not be used to measure the therapeutic effectiveness of various hospital programs.

6. Ratio of Net Releases to 1,000 Admissions The ratio "net releases per 1,000 admissions" is a convenient index for summarizing the live net movement into and out of the hospital. For example, if the ratio is less than 100, there were more admissions than net releases. Note that this index does not relate net releases to admissions in the sense of a percent or rate because not all releases during a year derive from the admissions during that year. Some of these net releases occurred to patients with lengths of stay greater than one year, that is, patients admitted during some prior year.

## B. Expenditure Ratios

The expenditure per average daily resident patient has been the most commonly used ratio for comparing mental hospital expenditures. Its major limitation is that it does not adequately take into account the number of admissions for which a large share of the expenditure is required. If the patient base is enlarged to include admissions during the year the resulting sum is the best available estimate of patients under treatment during the year. This quantity is actually defined as:

$$\left[ \begin{array}{c} \text{Patients} \\ \text{Under} \\ \text{Treatment} \end{array} \right] = \left[ \begin{array}{c} \text{Resident} \\ \text{Patient} \\ \text{Beginning} \\ \text{of Year} \end{array} \right] + \left[ \begin{array}{c} \text{All Admis-} \\ \text{sions} \\ \text{excluding} \\ \text{Transfers} \end{array} \right] + \left[ \begin{array}{c} \text{Returns from Leave} \\ \text{among Patients on} \\ \text{Leave Beginning} \\ \text{of Year} \end{array} \right]$$

The estimate, however, does not include the last term since these data are not available nationally.

The ratio of expenditures to patients under treatment appears to be a more realistic measure, but it does not solve the problem completely. While a larger share of the expenditures is required for the care of admissions, the index weights both admissions and resident patients equally.

The expenditure figures and ratios are not necessarily expenditures by state agencies alone inasmuch as county expenditures for the care of patients in the mental hospitals are included for Maryland, Michigan, New Jersey, Tennessee and Wisconsin, the only states with county mental hospitals. County data have been included to insure greater comparability among states in expenditures per patient.

## C. Interstate Variation

Considerable variation among states in patient movement, personnel, and expenditure data is indicated in Table 1.

Actual numbers are not comparable among states since they do not take into account differences in size of population. Therefore, ratios have been computed for several data categories.

For example, the number of admissions per 100,000 civilian population for the United States was 160--individual state ratios varied from 67 to 296. The net release ratios also show considerable variation. Net releases per 1,000 average resident patients ranged from 224 to 2,029; net releases per 1,000 total admissions, from

767 to 1,039. The drop in the resident patient population did not occur uniformly in all states. While the resident population decreased in 37 states including the District of Columbia, two states showed little change and twelve states had an increase in the number of residents. In addition, a high of \$12.24 per patient under treatment per day to a low of \$1.73 further points out the considerable variation existing among states.

However, as has been emphasized in Sections A4-A6, comparison of state ratios, while serving to highlight areas of differences, are limited. More detailed classifications of movement categories by such variables as age, sex, diagnosis and time on books are needed. Data on most of these variables as well as more detail on personnel and maintenance expenditures will be available in Patients in Mental Institutions (NIMH, U.S. PHS). This detail will provide partial explanations of the gross differences noted in the above tables. Also, as mentioned previously, other factors such as policies and laws affecting admission and release of patients, other community treatment facilities, effectiveness of therapeutic programs, etc., must be evaluated to determine the extent of their influence on interstate variation.

### III. TRENDS

For the 9th consecutive year, the RESIDENT PATIENT POPULATION in the State and county mental hospitals decreased--this has occurred in spite of increases in the general population. Prior to 1956, the trend had been one of increasing numbers of residents, with the exception of only one year (1943) which saw a slight decrease. With the decrease of 2.8 percent in 1964, the number of residents has dropped below 500,000.

Correspondingly, the number of NET RELEASES has continued to climb--a trend which began in the mid 1940's. In less than 10 years (1955-1964), the number has more than doubled. In 1964, there were 271,506 net releases as compared with 126,498 in 1955.

Along with increasing numbers of net releases and decreasing numbers of resident patients, the number of TOTAL ADMISSIONS has increased steadily, continuing another trend which began in the mid 1940's. In 1964, for the first time, the number of admissions exceeded 300,000. This has resulted in a 1964 admission rate of 160 patients per 100,000 civilian population, compared with 110 in 1955.

The number of DEATHS in the hospitals has continued to fluctuate--up one year and down the next. However, in 1964 there was a drop of almost 4,000 in this number.

There are now almost 200,000 FULL TIME PERSONNEL caring for the mentally ill in our 289 State and county hospitals. The ratio of personnel per patients has been an ever increasing one and in 1964 it reached one full time employee per every 2.5 patients.

The MAINTENANCE EXPENDITURES for the care of these patients have also greatly increased--going over a billion dollars in 1962--and still climbing. Converting these data into ratios, in 1964, \$3.83 was spent each day per patient under treatment as compared with \$2.33 in 1955.

Trends in certain patient movement categories are depicted graphically for 1938-1964 on page 5. These trends, as well as others, are indicated numerically for the years 1955-1964 in Table A and include estimates for under reporting wherever possible. Therefore, these totals, which are the most complete available, supersede totals published in prior reports. Also shown in Table A are the same data expressed as index numbers where 1955 is the base year. Thus, percent change since 1955 can be read directly from Table A with increases being numbers greater than 100 and decreases being numbers less than 100. For instance the 1958 index number for admissions is 117.9. This means that admissions in that year were 17.9 percent greater than 1955 admissions. An index number is computed by dividing each of the observed numbers by the corresponding number in the base time period for each movement and administrative data category. The year 1955 was selected as the base year primarily because the number of resident patients reached its maximum during that year. Also, the admission, net release, and death data were not atypical during 1955. Percentage change between the data for any two years other than 1955 may be computed by obtaining the difference between the two index numbers concerned and dividing this difference by the index number for the earlier year. For example, the index numbers for net releases in 1959 and 1960 are 139.5 and 151.3. The percent change between 1959 and 1960 is given by:

$$\frac{151.3 - 139.5}{139.5} = \frac{11.8}{139.5} = 8.46$$

Therefore, there was an 8.5 percent increase in net release between 1959 and 1960.

NUMBER OF RESIDENT PATIENTS, TOTAL ADMISSIONS, NET RELEASES, AND DEATHS,  
STATE AND COUNTY MENTAL HOSPITALS, UNITED STATES, 1939-'64

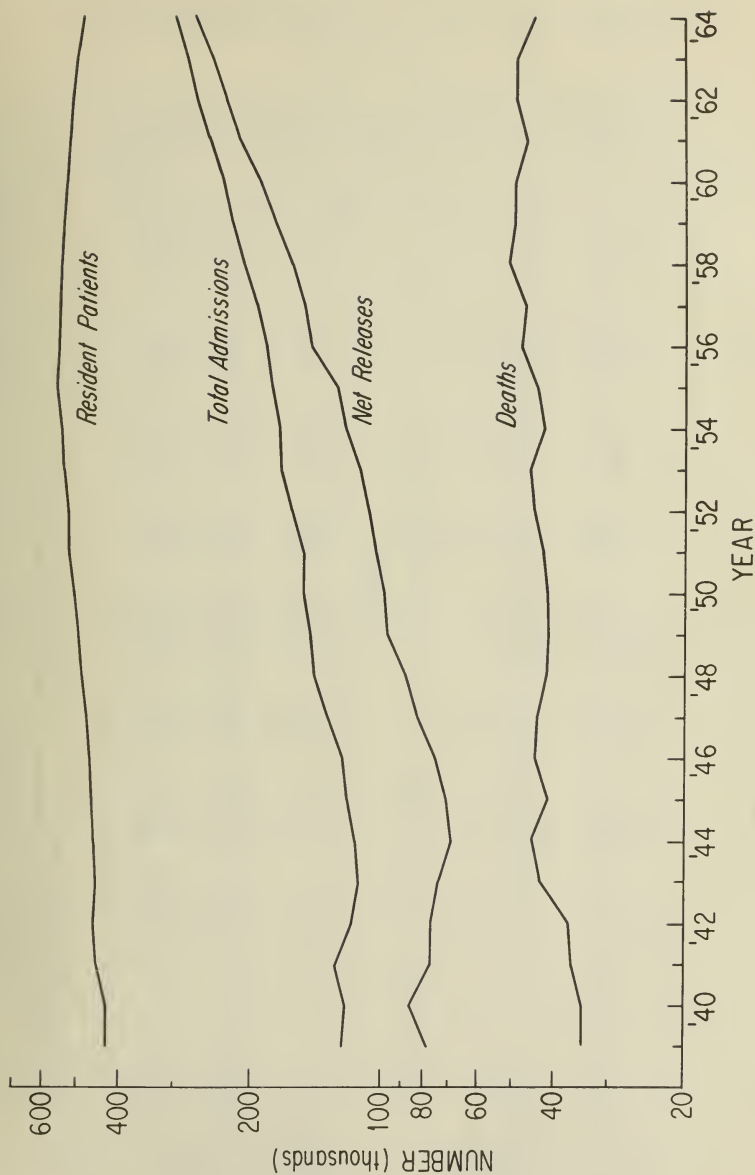


TABLE A  
RECENT TRENDS OF PATIENT MOVEMENT AND ADMINISTRATIVE DATA, STATE AND COUNTY MENTAL HOSPITALS  
UNITED STATES, 1955-1964

ITEM	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
All Admissions	179,003	185,597	194,497	209,893	222,791	234,791	249,742	269,854	285,591	302,946
Net Releases	126,498	135,373	150,731	161,762	176,432	182,618	215,586	236,518	248,515	261,166
Deaths in Hospital	44,384	48,256	46,848	51,353	49,647	43,748	46,880	49,563	49,032	45,186
Resident Patients										
End of Year	558,922	551,390	548,626	545,182	541,863	535,540	527,456	515,640	504,604	490,754
Personnel (full time)										
at End of Year	146,392	153,715	162,753	169,707	174,635	179,162	187,150	190,433	195,556	199,600
Maintenance Expenditures	\$619,087,247	\$663,280,934	\$731,875,462	\$806,711,228	\$849,592,595	\$916,236,166	\$974,614,297	\$1,035,567,884	\$1,081,557,167	\$1,135,015,575
Per Resident Patient										
Per Year	1,116.59	1,194.88	1,352.51	1,475.59	1,567.39	1,702.41	1,686.42	1,998.24	2,131.49	2,261.27
Per Pat. Under Treatmt.	5.06	5.26	5.63	4.94	4.29	4.56	5.03	5.47	5.64	6.23
Per Year	843.31	890.38	980.72	1,063.83	1,106.43	1,177.75	1,234.32	1,299.87	1,352.93	1,403.28
Per Day	2.33	2.43	2.69	2.91	3.03	3.22	3.38	3.56	3.71	3.83

INDEX NUMBERS

All Admissions	100.0	104.3	109.3	117.9	125.2	131.9	142.0	151.6	159.3	170.2
Net Releases	100.0	114.9	119.2	127.9	139.5	142.4	170.4	181.9	194.3	214.6
Deaths in Hospital	100.0	108.7	105.6	115.8	111.9	112.1	105.6	111.7	110.5	101.8
Resident Patients										
End of Year	100.0	98.7	98.2	97.5	97.0	95.8	94.4	92.3	90.3	87.8
Personnel (full time)										
at End of Year	100.0	105.0	111.2	115.9	119.3	122.4	127.8	130.1	133.4	136.3
Maintenance Expenditures	100.0	107.3	118.4	130.5	137.4	148.2	157.7	167.2	176.0	185.3
Per Resident Patient										
Per Year	100.0	107.0	119.3	132.2	140.4	152.5	164.5	179.0	190.9	204.3
Per Day	100.0	106.5	119.3	132.0	140.2	152.0	164.4	178.8	190.8	203.6
Per Pat. Under Treatmt.										
Per Year	100.0	104.6	115.5	125.3	130.3	139.7	145.3	153.1	159.3	165.2
Per Day	100.0	104.3	115.5	124.9	130.0	138.2	145.1	152.8	159.2	164.4

1/ Sources:

- 1955-1959: The Mental Health Statistics-Current Reports series. U.S. Department of Health, Education and Welfare; Public Health Service, National Institute of Mental Health.  
1960-1963: Patients in Mental Institutions, Part II. U.S. Department of Health, Education and Welfare; Public Health Service, National Institute of Mental Health.  
1964: The Preliminary Survey of State and County Mental Hospitals.



TABLE 1  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1964<sup>1/</sup>  
STATE AND COUNTY MENTAL HOSPITALS  
PATIENT MOVEMENT DATA

STATE	No. of Hosp.	Resident Patients Beginning of Year	Admissions (excluding transfers)				Net Releases Alive from Hospital <sup>2/</sup>	Deaths in Hospital	Resident Patients End of Year
			Total	No Prior Psych. Inpatient Experience	With Prior Admis. to Hosp. in Same System	All Other			
United States	289	504,500	302,946 <sup>3/</sup>	138,112 <sup>3/</sup>	107,894 <sup>3/</sup>	54,652 <sup>3/</sup>	271,506	45,186	490,754
Alabama	2	7,547	4,062	2,525	1,370	367	3,526	499	7,584
Alaska	2	296	312	109	179	24	273	10	325
Arizona	1	1,724	2,238	852	1,013	375	2,037	169	1,756
Arkansas	2	3,558	3,610	1,631	1,200	579	3,715	218	3,217
California	12	55,125	27,708	9,496	10,200	8,012	27,516	2,743	52,774
Colorado	2	4,316	3,095	1,311	1,182	592	3,408	355	3,658
Connecticut	3	8,279	8,156	4,013	3,421*	722*	7,241	982	8,212
Delaware	2	1,686	1,067	732	19	316	854	151	1,748
District of Col.	1	6,678	1,692	220*	498*	974*	1,590	428	6,352
Florida	4	9,822	4,751	1,729	1,139	1,863	3,670	897	9,986
Georgia	1	12,014	6,786	4,906	1,677	203	5,589	1,114	12,097
Hawaii	1	1,017	432	123*	140*	169*	437	56	956
Idaho	2	867	947	547	367	33	948	111	755
Illinois	13	34,442	17,641*	5,682*	8,026*	4,133*	16,143*	3,287*	32,853*
Indiana	9	11,205	4,621	2,344	1,444	835	3,965	757	11,104
Iowa	6	3,068	4,744	2,083	1,885	776	4,916	276	2,620
Kansas	3	2,966	2,618	1,507*	886*	225*	2,621	162	2,801
Kentucky	4	5,453	5,536	2,462	2,114	760	4,965	574	5,250
Louisiana	3	7,006	6,271*	3,128*	2,252*	891*	6,178*	392*	6,709*
Maine	2	2,838	1,752	986	646	98	1,375	526	2,869
Maryland <sup>4/</sup>	6	8,151	7,779	4,559	2,903*	337*	6,894	870	8,166
Massachusetts	13	18,474	12,149*	6,202*	5,830*	117*	11,068*	1,678	17,877
Michigan	10	20,357	6,846	2,985*	2,065*	1,796*	6,494	977	19,732
Minnesota	8	7,749	5,751*	2,416*	2,480*	855*	5,590*	682	7,208
Mississippi	2	5,412	4,110	2,105*	1,637*	368*	3,793	325	5,404
Missouri	6	10,814	4,208	2,239	1,168	801	3,458	754	10,810
Montana	1	1,587	1,566	801	499	266	1,439	179	1,555
Nebraska	4	3,729	2,627	1,317	971	339	2,423	380	3,553
Nevada	1	550	566	100	117	349	582	53	481
New Hampshire	1	2,465	1,499	676*	475	348*	1,255	292	2,419
New Jersey	12	20,694	11,546	6,499	3,851	996	9,224	2,480	20,336
New Mexico	1	1,023	1,048	637	336	75	939	137	995
New York	23	88,841	34,208	9,134*	12,020*	13,054*	28,954	9,446	86,649
North Carolina	4	9,878	10,685	5,753	4,092*	840*	9,678	1,023	9,862
North Dakota	1	1,563	1,387	724	469	194	1,517	113	1,520
Ohio <sup>5/</sup>	20	22,647	17,774	8,457	7,200*	2,117*	16,212	1,844	22,365
Oklahoma	4	6,354	3,650	1,909	1,144	597	3,648	457	5,879
Oregon	3	3,691	3,602	1,814	1,297	491	3,741	350	3,202
Pennsylvania <sup>6/</sup>	19	37,205	10,812	6,612	1,592	2,608	8,287	2,919	36,811
Rhode Island	1	3,316	2,088	---	---	---	1,790	405	3,209
South Carolina	1	6,658	3,569	2,445*	1,086*	58*	3,025	581	6,621
South Dakota	1	1,594	1,555	937	591	7	1,276	167	1,686
Tennessee	6	8,176	7,400	3,281	3,058	1,081	6,750	779	8,047
Texas	9	15,910	14,231	7,381	5,272	1,578	13,087	1,589	15,665
Utah	1	613	1,261	482	328	451	1,211	85	580
Vermont	1	1,220	727	451	296	---	593	119	1,255
Virginia	4	11,452	5,854	3,017	2,154*	685*	4,765	1,011	11,512
Washington	3	4,680	3,668	2,034*	1,314*	320*	3,546	462	4,340
West Virginia	5	5,225	4,251	1,867	881	1,503	3,821	481	5,174
Wisconsin	42	13,920	8,105	4,476	3,019	610	7,259	1,166	13,600
Wyoming	1	683	675	456	129	90	586	77	695

NOTE: Refer to page 10 for footnotes.

TABLE 1 (Continued)

PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1964<sup>1/</sup>

## STATE AND COUNTY MENTAL HOSPITALS

## PERSONNEL AND FINANCIAL DATA

STATE	Average Daily Resident Patient Population	Patients under Treatment	Total Full-time Personnel End of Year	Maintenance Expenditures		
				Total Amount	Per Resident Patient <sup>1/</sup>	Per Patient Under Treatment <sup>2/</sup>
United States	496,661	807,446	199,600	\$1,133,015,675	\$6.23	\$5.83
Alabama	7,571	11,809	1,965	9,604,700	3.47	2.26
Alaska	507	608	352*	2,724,489	24.25	12.24
Arizona	1,760	3,962	662	5,000,520	7.76	3.45
Arkansas	3,304	7,148	1,547	7,350,918	6.08	2.81
California	32,849	62,835	13,890	104,333,929	8.68	4.54
Colorado	3,784	7,401	2,690	16,137,933	11.65	5.96
Connecticut	8,280	16,435	4,023	22,691,234	7.49	3.77
Delaware	1,725	2,753	940*	4,191,928*	6.64*	4.16*
District of Columbia	6,518	8,370	4,005	28,722,210	12.04	9.38
Florida	9,949	14,555	4,329	18,656,865	5.12	3.50
Georgia	12,046	18,800	2,936	15,238,788	3.46	2.21
Hawaii	998	1,449	399	2,858,654	7.83	5.39
Idaho	820	1,814	451	2,492,948	8.31	3.75
Illinois	33,745	52,283	12,449	73,573,008*	5.96*	3.84*
Indiana	11,246	15,826	5,187	25,514,077*	6.20*	4.40*
Iowa	2,859	7,812	2,148	10,924,588*	10.44*	3.82*
Kansas	2,844	5,584	2,339	12,688,626	12.19	6.21
Kentucky	5,399	10,789	2,118	11,514,759*	5.73*	2.87*
Louisiana	6,813	13,279	2,686	12,661,318*	5.08*	2.61*
Maine	2,851	4,570	1,053	5,403,202	5.18	3.25
Maryland	8,082	15,950	3,858	20,449,749	6.91	3.51
Massachusetts	18,144	30,625	6,618*	51,449,486*	7.75*	4.59*
Michigan	20,124	27,203	6,675*	50,350,442*	6.84*	5.06*
Minnesota	7,559	13,480	2,876*	18,216,446	6.58	3.69*
Mississippi	5,354	9,522	1,705	6,028,674	3.08	1.73
Missouri	10,933	15,022	5,104	23,252,488	5.81	4.23
Montana	1,541	3,153	575	3,125,264	5.54	2.71
Nebraska	3,659	6,356	2,283	9,731,754	7.27	4.18
Nevada	527	1,116	250	1,736,893	9.00	4.25
New Hampshire	2,462	3,964	952	5,134,184	5.70	3.54
New Jersey	20,439	32,040	9,173	48,500,828	6.48	4.14
New Mexico	1,011	2,071	490	2,431,782	6.57	3.21
New York	87,897	123,043	33,472	198,272,864	6.16	4.40
North Carolina	9,888	20,565	5,625	19,885,225	5.49	2.64
North Dakota	1,564	2,950	599	3,418,048	5.97	3.17
Ohio <sup>3/</sup>	22,333	40,421	8,523	44,846,691	5.49	3.03
Oklahoma	6,106	9,984	2,705	10,530,654	4.71	2.88
Oregon	3,425	7,293	1,422	9,530,048	7.60	3.57
Pennsylvania	37,043	46,017	13,931	77,458,570	5.71	4.41
Rhode Island	3,269	5,404	1,556	7,857,979	6.57	3.97
South Carolina	6,535	10,227	1,857	8,702,201	3.64	2.32
South Dakota	1,632	3,129	750	3,137,242	5.19	2.74
Tennessee	8,210	15,576	3,013	12,534,111	4.17	2.20
Texas	15,734	30,141	5,663	26,214,759	4.55	2.38
Utah	605	1,674	450	2,375,585	10.76	3.46
Vermont	1,224	1,947	489	2,778,721	6.20	3.90
Virginia	11,492	17,306	3,786	17,410,437	4.14	2.75
Washington	4,534	8,346	2,289	14,588,705	8.79	4.77
West Virginia	5,197	9,476	1,377	6,721,838	3.53	1.94
Wisconsin <sup>4/</sup>	13,768	22,025	5,143	32,792,000*	6.51	4.07
Wyoming	684	1,558	266	1,467,337	5.86	2.95

NOTE: Refer to page 10 for footnotes.

TABLE 1 (Continued)

PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1964 <sup>1/</sup>

## STATE AND COUNTY MENTAL HOSPITALS

## PATIENT MOVEMENT RATIOS

STATE	Per 100,000 Civilian Population <sup>10/</sup>		Per 1,000 Average Resident Patients <sup>11/</sup>			Net Releases per 1,000 Total Admissions
	Total Admissions	Average Daily Resident Patient Population	Total Admissions	Net Releases Alive from Hospital	Deaths in Hospital	
United States	160.0	262.3	606.8	545.6	90.8	896.2
Alabama	120.0	223.7	536.9	466.0	66.0	869.0
Alaska	143.1	140.6	1,003.2	877.8	32.2	875.0
Arizona	143.4	112.7	1,286.2	1,170.7	97.1	910.2
Arkansas	188.2	172.3	1,068.7	1,099.2	64.5	1,028.5
California	156.1	185.1	816.1	804.6	80.8	985.9
Colorado	160.2	196.5	775.7	856.9	89.3	1,104.7
Connecticut	236.4	300.9	989.1	878.1	119.1	887.8
Delaware <sup>12/</sup>	221.4	357.9	621.4	497.4	87.9	800.4
District of Columbia	174.7	656.7	259.7	244.1	65.7	939.7
Florida	84.4	177.4	477.7	370.6	90.6	775.7
Georgia	161.7	287.0	562.9	465.6	92.4	823.6
Hawaii	67.4	155.7	437.7	442.8	56.7	1,011.6
Idaho	158.0	119.5	1,167.7	1,168.9	136.9	1,001.1
Illinois	170.6*	325.1	530.2*	479.5*	97.7*	904.8*
Indiana	96.0	235.5	414.3	355.4	67.9	656.0
Iowa	172.2	105.8	1,668.1	1,728.6	97.0	1,036.3
Kansas	119.6	129.9	907.8	908.8	56.2	1,001.1
Kentucky	171.4	173.4	998.9	935.2	107.5	934.2
Louisiana	182.7*	198.5	914.3*	900.7*	57.2*	985.2*
Maine	178.4	293.6	606.9	481.8	114.2	793.9
Maryland	250.3	239.3	953.4	845.0	106.6	886.2
Massachusetts	229.4*	342.5	668.4*	608.9*	92.3	911.0*
Michigan	84.8	249.2	541.5	324.0	48.7	948.6
Minnesota	163.0*	215.0	766.3*	747.4*	91.2	975.4*
Mississippi	179.5	233.8	760.0	701.4	60.1	922.9
Missouri	96.2	250.0	369.2	319.8	69.7	821.8
Montana	225.3	221.7	1,003.2	921.8	114.7	916.9
Nebraska	179.8	250.4	721.5	665.5	104.4	922.3
Nevada	141.5	131.8	1,096.9	1,127.9	102.7	1,028.3
New Hampshire	231.7	380.5	613.8	513.1	119.6	855.9
New Jersey	171.2	308.3	553.1	449.6	120.9	813.0
New Mexico	106.2	102.4	1,038.7	930.6	135.8	896.0
New York	191.4	491.9	589.9	507.2	107.7	787.9
North Carolina	224.4	207.7	1,082.6	980.5	103.6	905.8
North Dakota	218.8	246.7	899.5	854.1	73.3	949.5
Ohio <sup>5/</sup>	176.3	221.5	789.7	720.3	81.9	912.1
Oklahoma	150.1	251.1	597.7	597.3	74.8	939.5
Oregon	193.1	183.6	1,045.0	1,085.3	101.5	1,036.6
Pennsylvania	94.5	323.7	292.2	223.9	78.9	766.5
Rhode Island	235.4	368.5	639.9	546.6	124.1	657.3
South Carolina	143.3	262.4	537.5	455.6	87.5	847.6
South Dakota	216.8	233.3	936.0	778.0	101.8	831.3
Tennessee	196.3	217.8	912.2	832.1	96.0	912.2
Texas	139.2	153.8	901.4	828.9	86.0	919.6
Utah	127.6	61.0	2,112.2	2,028.5	139.0	960.3
Vermont	178.2	300.0	592.0	482.9	96.9	815.7
Virginia	138.7	272.3	509.8	416.6	88.1	817.0
Washington	125.2	154.7	813.3	786.3	102.4	966.7
West Virginia	236.7	289.4	817.5	734.8	92.5	898.8
Wisconsin	197.6	355.6	589.0	527.5	84.7	895.6
Wyoming	199.7	202.4	979.7	850.5	111.8	868.1

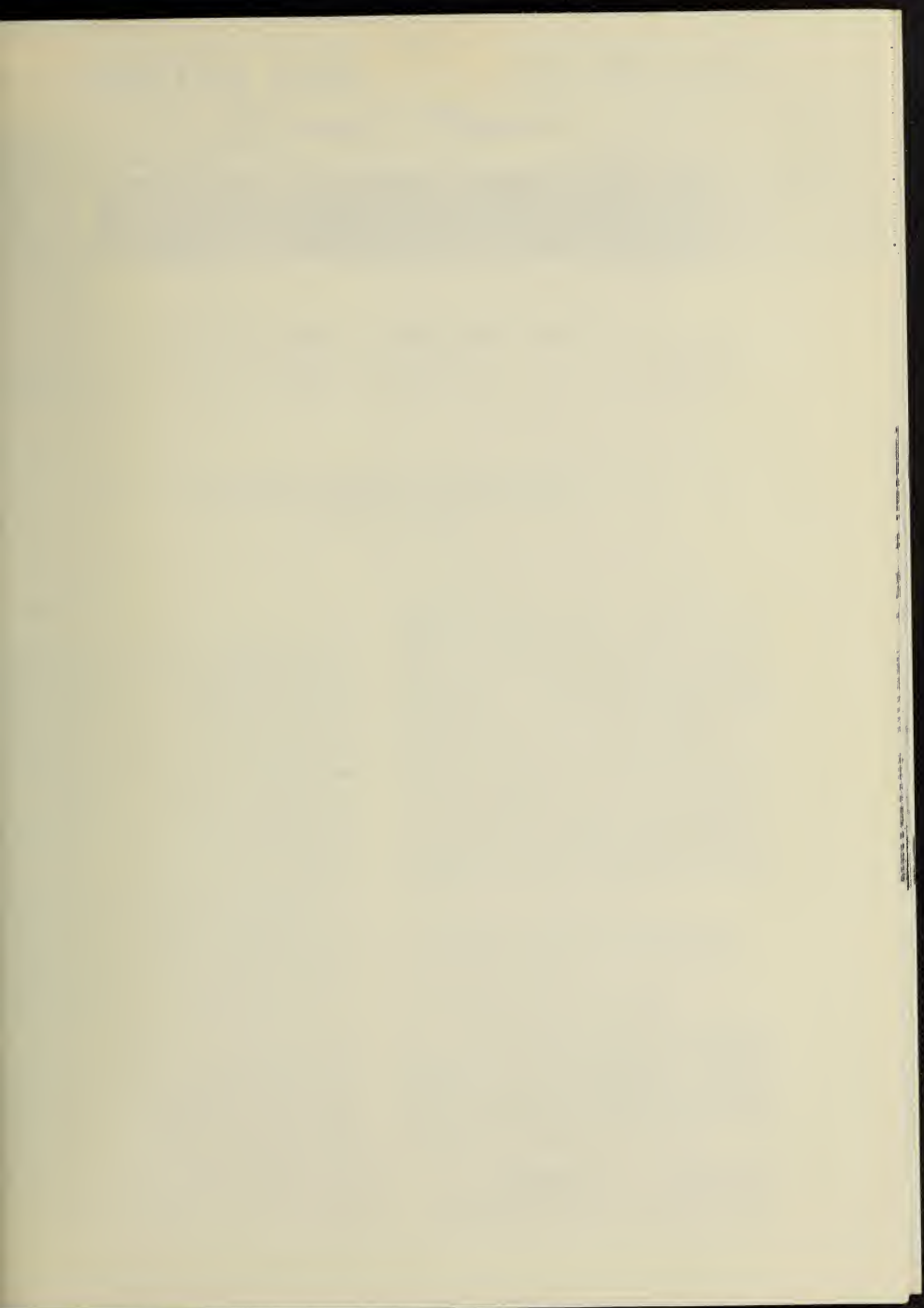
NOTE: Refer to page 10 for footnotes.

- 1/ These data were taken from the 1964 Provisional Survey of the state and county mental hospitals. Exceptions are given in footnotes.
- 2/ Net releases are defined as the net number of patients released alive from the hospital in any one year.
- 3/ Type of admission data were not available, for this table, for 2,088 patients. (See footnote 6.) Therefore, for the U.S. total, the number of patients in the three admission categories will not add to the total number of admissions.
- 4/ Maryland: "Admissions with prior admissions to hospitals in the same state system" and "all other admissions" public mental hospital data from Maryland for the 1963 Census of Patients in Mental Institutions were used as a basis for pro-rating the 1964 total admissions between these two categories.
- 5/ Ohio: Effective July 1, 1961, two of the facilities in Ohio (formerly classified as state hospitals for mentally ill) were designated as public institutions for the mentally retarded. Mentally ill patients in these two facilities (i.e. a total of 291 average daily resident patients) were reported and are included in the above table. However, personnel and financial data corresponding to these mentally ill patients are not available. In addition, one other facility classified as a mental hospital has mentally ill and mentally retarded patients. For this facility only the number of mentally ill patients was reported, thus excluding the number of mentally retarded patients. However, the personnel and financial data reported pertained to all patients in the hospital.
- 6/ Rhode Island: Data by type of admission are not available.
- 7/ Per resident patient maintenance expenditures are based on the average daily resident patient population of hospitals reporting expenditures.
- 8/ Per patient under treatment maintenance expenditures are based on the patients under treatment for hospitals reporting expenditures.
- 9/ Wisconsin: One hospital closed and it did not report maintenance expenditures. Therefore, 58 patients were excluded from the denominator in computing daily expenditures per patient under treatment.
- 10/ Admission and average daily resident patient rates are per 100,000 estimated civilian population. Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 289. Provisional estimate for July 1, 1964.
- 11/ These ratios are based on the average of the beginning and end of year resident patient population.
- 12/ District of Columbia: Since a substantial proportion of the patients at the St. Elizabeths Hospital are non-residents of the District of Columbia, total admission and resident patient rates per 100,000 population are computed only for residents of the District of Columbia. District residents include 1,387 total admissions and 5,214 average daily resident patients.

Symbols used: \* Indicates data which are estimates or include estimates.

--- Data not available.





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PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA  
STATE AND COUNTY MENTAL HOSPITALS  
UNITED STATES

1965

I. PURPOSE

Since the passage of the National Mental Health Act by Congress in 1946, the National Institute of Mental Health has been responsible for collecting and publishing data on the hospitalized mentally ill in the United States--data necessary to answer requests from members of Congress, State legislators, project planners, hospital administrators and other persons interested in the field of mental illness. These data are extremely useful, for example, in planning for facilities and services, research and training, and legislation and financing. In an effort to provide current data, the provisional survey statistics tabulated in these Mental Health Statistics--Current Reports (Series MHB-H) are collected and published annually for certain patient movement and administrative categories, by state, for the state and county mental hospitals. (Similar data are published for the Public Institutions for the Mentally Retarded in the Series MHB-I)

Certain trend data for the United States, covering the period 1955 through 1965 may be found in Table A. A graph depicts trends for some of the patient movement categories from 1939 through 1965. The data, by state for the current year, fiscal 1965, are found in Table 1. These data were obtained from the 1965 "Preliminary Survey of State and County Mental Hospitals". As these data are provisional, they are subject to some change. Data in greater detail--

admissions with no prior psychiatric inpatient experience and resident patients by age, sex and mental disorder; personnel by occupation; maintenance expenditure by type--will appear in the future publication of Part II in the series, Patients in Mental Institutions, (U.S. Dept. of HEW, PHS, NIMH). Data for patients in the private mental hospitals, data for the psychiatric patients in general hospitals, and for patients in the public and private institutions for the mentally retarded will be available in other parts of the series. Data for patients served in psychiatric outpatient clinics will be available in separate publications prepared by the Office of Biometry of the National Institute of Mental Health.

II. DESCRIPTION AND LIMITATIONS  
OF THE DATA

A. Patient Movement Data

The summary data presented in this report may be used to analyze the annual changes in year end populations of the state and county mental hospitals in terms of three categories of patient movement (admissions, net releases and deaths). These categories are defined as follows:

1. Admissions: This category includes three admission classifications. Admissions With No Prior Psychiatric

Inpatient Experience includes patients admitted to hospitals with no record of prior admission to any inpatient psychiatric facility either within or outside the state system. The state system is defined to include state and county mental hospitals and public institutions for the mentally retarded. This category replaces the former classification, first admissions, which was defined as "a patient who has not previously been admitted to a public or nonpublic hospital authorized for the treatment of mental disorders." The major difference between these two definitions lies in the area of psychiatric services in general hospitals. In using the first admission definition, some states did not consider prior psychiatric treatment in a general hospital as constituting a previous psychiatric admission. Under the present definition such cases are considered as having a prior admission to an inpatient psychiatric facility. Therefore, the number of admissions with no prior inpatient psychiatric experience will either be less than or equal to the number of first admissions (old definition). Admissions With Prior Admission to Hospitals in Same State System are patients admitted to the hospital with a history of prior admission to a public mental hospital or a public institution for mentally retarded in the same state. All Other Admissions include patients admitted to the hospital with prior admission to other inpatient psychiatric facilities—state psychiatric facilities in other states, Veterans Administration hospitals, private mental hospitals, private institutions for the mentally retarded, and any other inpatient psychiatric facilities (including psychiatric services in general hospitals) which are medical facilities accepting patients for screening and/or treatment of psychiatric disorders.

2. Net Releases Alive from Hospital The concept of "net release alive from hospital" takes into account movement of patients into and out of the hospital since this quantity is the number of placements on extramural care plus direct discharges from the hospital less the number of returns from extramural care, all occurring during any one year. National data on placements and returns from extramural care are not available but net releases may be computed from less detailed movement data as:

$$\left[ \begin{array}{c} \text{Net} \\ \text{Releases} \\ \text{Alive from} \\ \text{Hospital} \end{array} \right] = \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{Beginning} \\ \text{of Year} \end{array} \right] + \left[ \begin{array}{c} \text{All Admis-} \\ \text{sions} \\ \text{excluding} \\ \text{Transfers} \end{array} \right] - \left[ \begin{array}{c} \text{Deaths} \\ \text{in} \\ \text{Hospital} \end{array} \right] - \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{End of} \\ \text{Year} \end{array} \right]$$

Interpretation of net releases alive from hospital should be made with caution. This quantity is the net number of releases alive from the state hospital system and includes not only direct discharges to the community and placement on leave but also direct discharges to other inpatient facilities outside the state system such as Veterans Administration hospitals, nursing homes, boarding care homes, and mental hospitals in other states. The number of net releases is used as a measure of movement out of the hospital rather than the total number of discharges because many discharges occur while patients are already outside the hospital on extramural care. The number of net releases may be considered an estimate of the number of effective releases from the hospital under the assumption that subtracting returns from leave during the year removes only the short term visits, leaves, and escapes and retains the effective releases; i.e., those from which the patients did not return to the hospital within the time period covered.

3. Deaths in Hospital This category includes only deaths occurring to patients resident in the hospital and does not include deaths among patients on leave even though these patients are still on the hospital books.

4. Patient Movement Ratios per 100,000 Civilian Population The admission ratio measures the proportion of people coming under care during the year while the average daily resident patient ratio measures the average proportion of the population under care at any one time during the year.

5. Patient Movement Ratios per 1,000 Average Resident Patients These ratios relate the average resident population to three movement categories: Total admissions, Net releases and Deaths, thus providing indexes of the amount and type of patient movement activity that occurred during the year. It should be kept in mind that the ratios shown in this publication are based on totals and as such they have the limitations of totals since they are not standardized for such important variables as age, sex, diagnosis, and years of hospitalization. To illustrate how these ratios are descriptive of changes in resident patient populations, consider the following hypothetical example: Suppose that the resident patient populations in State A and State B each decreased by 0.6 percent (or 6 per 1,000).



Considering only these data gives a limited and potentially misleading view of patient movement activity. However, now suppose that the patient movement ratios are computed to be the following:

Movement Category	State A	State B
Admissions	323.7	522.2
Net Releases	229.5	454.8
Deaths	99.9	73.5

These ratios show that State B has much higher rates of patient movement into and out of the hospital than State A. While these ratios highlight areas of difference between the two states, conclusions based only on these ratios may be fallacious. The differences can be isolated further by analyzing the data in terms of the patient characteristics mentioned above (age, sex, diagnosis, and years of hospitalization). Even at this point, one cannot evaluate the relative efficacy of the two state mental hospital programs since differences in patient movement ratios between states may also be attributable to a great many other factors, such as policies and laws controlling admissions and release, the ways in which the mental hospitals are utilized by the communities they serve, the types of patients admitted, the various treatment programs within the hospitals, and the availability of various community facilities that can serve as adjuncts or alternatives to hospitalization. Since the reasons for interstate differences in these movement ratios are complex and vary considerably from hospital to hospital within and between states, ratios constructed from gross movement data (i.e. state totals) can not be used to measure the therapeutic effectiveness of various hospital programs.

6. Ratio of Net Releases to 1,000 Admissions The ratio "net releases per 1,000 admissions" is a convenient index for summarizing the live net movement into and out of the hospital. For example, if the ratio is less than 100, there were more admissions than net releases. Note that this index does not relate net releases to admissions in the sense of a percent or rate because not all releases during a year derive from the admissions during that year. Some of these net releases occurred to patients with lengths of stay greater than one year, that is, patients admitted during some prior year.

## B. Expenditure Ratios

The expenditure per average daily resident patient has been the most commonly used ratio for comparing mental hospital expenditures. Its major limitation is that it does not adequately take into account the number of admissions for which a large share of the expenditure is required. If the patient base is enlarged to include admissions during the year the resulting sum is the best available estimate of patients under treatment during the year. This quantity is actually defined as:

$$\left[ \begin{array}{c} \text{Patients} \\ \text{Under} \\ \text{Treatment} \end{array} \right] = \left[ \begin{array}{c} \text{Resident} \\ \text{Patient} \\ \text{Beginning} \\ \text{of Year} \end{array} \right] + \left[ \begin{array}{c} \text{All Admis-} \\ \text{sions} \\ \text{excluding} \\ \text{Transfers} \end{array} \right] - \left[ \begin{array}{c} \text{Returns from Leave} \\ \text{among Patients on} \\ \text{Leave Beginning} \\ \text{of Year} \end{array} \right]$$

The estimate, however, does not include the last category, Returns from Leave, since these data are not available nationally.

The ratio of expenditures to patients under treatment appears to be a more realistic measure, but it does not solve the problem completely. While a larger share of the expenditures is required for the care of admissions, the index weights both admissions and resident patients equally.

The expenditure figures and ratios are not necessarily expenditures by state agencies alone inasmuch as county expenditures for the care of patients in the mental hospitals are included for Maryland, Michigan, New Jersey, Tennessee and Wisconsin, the only states with county mental hospitals. County data have been included to insure greater comparability among states in expenditures per patient.

## C. Interstate Variation

Considerable variation among states in patient movement, personnel, and expenditure data is indicated in Table 1.

Actual numbers are not comparable among states since they do not take into account differences in size of population. Therefore, ratios have been computed for several data categories.

For example, the number of admissions per 100,000 civilian population for the United States was 164--individual state ratios varied from 72 to 314. The net release ratios also show considerable variation. Net releases per 1,000 average resident patients ranged from 236 to 2,029; net releases per 1,000 total admissions, from

754 to 1,211. The drop in the resident patient population did not occur uniformly in all states. While the resident population decreased in 42 states including the District of Columbia, five states showed little change and four states had an increase in the number of residents. In addition, a high of \$11.82 per patient under treatment per day to a low of \$1.77 further points out the considerable variation existing among states.

However, as has been emphasized in Sections A4-A6, comparison of state ratios, while serving to highlight areas of differences, are limited. More detailed classifications of movement categories by such variables as age, sex, diagnosis and time on books are needed. Data on age, sex, and diagnosis as well as more detail on personnel and maintenance expenditures will be available in Patients in Mental Institutions (NIMH, U.S. PHS). This detail will provide partial explanations of the gross differences noted in the above tables. Also, as mentioned previously, other factors such as policies and laws affecting admission and release of patients, other community treatment facilities, effectiveness of therapeutic programs, etc., must be evaluated to determine the extent of their influence on interstate variation.

### III. TRENDS

For the 10th consecutive year, the RESIDENT PATIENT POPULATION in the State and county mental hospitals has decreased from 559,000 in 1955 to 476,000 in 1965 or a drop of 15% during the 10 year period. This has occurred in spite of increases in the general population. Prior to 1956, the trend had been one of increasing numbers of residents, with the exception of only one year (1943) which saw a slight decrease.

Correspondingly, the number of NET RELEASES has continued to climb--a trend which began in the mid 1940's. In 10 years (1955-1965), the number has more than doubled. In 1965, there were 286,989 net releases as compared with 126,498 in 1955.

Along with increasing numbers of net releases and decreasing numbers of resident patients, the number of TOTAL ADMISSIONS has increased steadily, continuing another trend which began in the mid 1940's. In 1965, the number of admissions was approximately 314,000. This has resulted in a 1965 admission rate of 164 patients per 100,000 civilian population, compared with 110 in 1955.

The number of DEATHS in the hospitals has fluctuated--over the years. In 1965

44,000 deaths were reported. This is the lowest number of deaths reported in the last 10 years.

There are more than 230,000 FULL TIME PERSONNEL caring for the mentally ill in our 289 State and county hospitals. The ratio of personnel per patients has been an ever increasing one and in 1965 it reached one full time employee for every 2.1 patients.

The MAINTENANCE EXPENDITURES for the care of these patients have also greatly increased--going over a billion dollars in 1962--and still climbing. Converting these data into ratios, in 1965, \$4.08 was spent each day per patient under treatment as compared with \$2.33 in 1955.

Trends in certain patient movement categories are depicted graphically for 1939-1965 on page 5. These trends, as well as others, are indicated numerically for the years 1955-1965 in Table A and include estimates for under reporting wherever possible. Therefore, these totals, which are the most complete available, supersede totals published in prior reports. Also shown in table A are the same data expressed as index numbers where 1955 is the base year. Thus, percent change since 1955 can be read directly from Table A with increases being numbers greater than 100 and decreases being numbers less than 100. For instance the 1958 index number for admissions is 117.9. This means that admissions in that year were 17.9 percent greater than 1955 admissions. An index number is computed by dividing each of the observed numbers by the corresponding number in the base time period for each movement and administrative data category. The year 1955 was selected as the base year primarily because the number of resident patients reached its maximum during that year. Also, the admission, net release, and death data were not atypical during 1955. Percentage change between the data for any two years other than 1955 may be computed by obtaining the difference between the two index numbers concerned and dividing this difference by the index number for the earlier year. For example, the index numbers for net releases in 1959 and 1960 are 139.5 and 151.3. The percent change between 1959 and 1960 is given by:

$$\frac{151.3 - 139.5}{139.5} = \frac{11.8}{139.5} = 8.46$$

Therefore, there was an 8.5 percent increase in net release between 1959 and 1960.

NUMBER OF RESIDENT PATIENTS, TOTAL ADMISSIONS, NET RELEASES, AND DEATHS,  
STATE AND COUNTY MENTAL HOSPITALS, UNITED STATES, 1939-'65

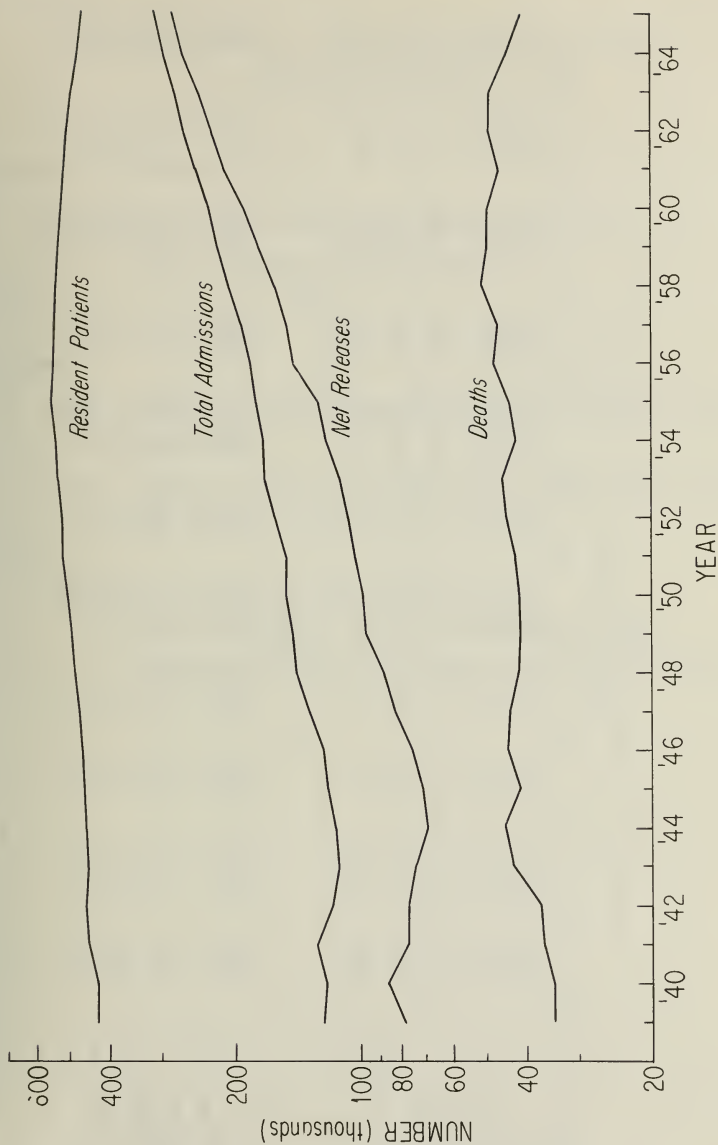


TABLE A  
RECENT TRENDS OF PATIENT MOVEMENT AND ADMINISTRATIVE DATA, STATE AND COUNTY MENTAL HOSPITALS  
UNITED STATES, 1955-1965 1/

ITEM	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
All Admissions	178,003	185,597	194,497	209,823	222,791	234,791	252,742	269,854	283,591	302,946	314,443
Net Releases	126,498	145,313	150,791	161,742	176,412	192,418	215,596	230,158	245,745	271,506	286,989
Deaths in Hospital	44,384	48,236	46,848	51,383	49,647	49,748	46,880	49,563	49,052	45,186	44,270
Resident Patients End of Year	558,922	551,390	548,626	545,182	541,883	535,540	527,456	515,640	506,694	490,754	475,761
Personnel (full time) at end of year	146,392	153,715	162,753	169,707	174,635	179,162	187,150	190,433	195,356	199,600	230,564
Maintenance Expenditures Per Resident Patient	\$618,087,247	\$663,280,934	\$731,875,462	\$806,711,228	\$849,493,595	\$916,236,166	\$974,614,297	\$1,033,567,884	\$1,081,537,167	\$1,133,015,675	\$1,201,979,234
Per Year	1,116.59	1,194.88	1,332.31	1,475.89	1,567.39	1,702.41	1,836.42	1,998.24	2,131.49	2,281.27	2,461.05
Per Day	3.06	3.26	3.65	4.04	4.29	4.65	5.03	5.47	5.84	6.23	6.74
Per Patients Under Treatment	849.31	890.38	980.72	1,063.83	1,106.43	1,177.75	1,234.32	1,299.87	1,352.93	1,403.28	1,489.40
Per Year	2.33	2.43	2.69	2.91	3.03	3.22	3.38	3.56	3.71	3.83	4.08

INDEX NUMBERS

All Admissions	100.0	104.3	109.3	117.9	125.2	131.9	142.0	151.6	159.3	170.2	176.7
Net Releases	100.0	114.9	119.2	127.9	139.5	152.4	170.4	181.9	196.3	214.6	226.9
Deaths in Hospital	100.0	108.5	104.5	115.5	110.5	108.5	103.6	101.6	100.0	97.1	94.6
Resident Patients End of Year	100.0	98.7	98.2	97.3	97.0	95.8	94.4	92.3	90.3	87.8	85.1
Personnel (full time) at end of year	100.0	105.0	111.2	115.9	119.3	122.4	127.8	130.1	133.4	136.3	157.5
Maintenance Expenditures Per Resident Patient	100.0	107.3	118.4	130.5	137.4	146.2	157.7	167.2	175.0	183.3	194.5
Per Year	100.0	107.0	119.3	132.2	140.4	152.5	164.5	179.0	190.9	204.3	220.4
Per Day	100.0	106.5	119.3	132.0	140.2	152.0	164.4	178.8	190.8	203.6	220.3
Per Patients Under Treatment	100.0	104.8	115.5	125.3	130.3	138.7	145.3	153.1	159.3	165.2	175.4
Per Year	100.0	104.3	115.5	124.9	130.0	138.2	145.1	152.8	159.2	164.4	175.1

1/ Sources:

- 1956-1959: The Mental Health Statistics—Current Reports series. U.S. Department of Health, Education and Welfare; Public Health Service, National Institute of Mental Health.  
1960-1963: Patients in Mental Institutions, Part II. U.S. Department of Health, Education and Welfare; Public Health Service, National Institute of Mental Health.  
1964-1965: The Preliminary Survey of State and County Mental Hospitals.



U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE  
NATIONAL INSTITUTE OF MENTAL HEALTH

ERRATA FOR SERIES MHB-H-10:

Provisional Patient Movement and Administrative Data  
State and County Mental Hospitals  
1965

Page 6:

- 1965 - Number of full-time personnel should be changed from 230,564 to 204,091
- 1965 - Number of full-time personnel index number should be changed from 157.5 to 139.4

Page 8:

- Under Total Full-time Personnel End of Year
  - New York should be changed from 60,805 to 34,332
  - United States should be changed from 230,564 to 204,091.

THE UNIVERSITY OF CHICAGO

TABLE 1.  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1965 <sup>1/</sup>

STATE AND COUNTY MENTAL HOSPITALS

PATIENT MOVEMENT DATA

STATE	Number of Hospitals	Resident Patients Beginning of Year	Admissions (excluding transfers)				Net Releases Alive from Hospital <sup>2/</sup>	Deaths in Hospital	Resident Patients End of Year
			Total	No Prior Psych. Inpatient Experience	With Prior Admis. to Hosp. in Same System	All Other			
United States	289	492,577	314,443	144,042	115,486	54,915	286,989	44,270	475,761
Alabama	2	7,584	4,295	2,372	1,352	571*	3,622	566	7,691
Alaska	2	324	317	192	96	29	323	6	312
Arizona	1	1,756	1,770	882	559	329	1,688	154	1,684
Arkansas	2	3,217	3,906	1,939	1,350	617	4,122	222	2,779
California	12	32,769	28,261	10,651	10,983	6,627	28,696	1,985	30,349
Colorado	2	3,638	3,095	1,304	1,325	466	3,331	264	3,138
Connecticut	3	8,212	8,859	4,067	3,952*	840*	8,131	1,032	7,908
Delaware	2	1,767	1,177	856	316	5	1,100	177	1,667
District of Columbia	1	6,352	1,965	330*	611*	1,024*	1,784	402	6,131
Florida	4	9,986	4,808	1,832	1,194	1,782	3,872	930	9,992
Georgia	1	12,097	6,692	4,733	1,819	140	5,920	1,046	11,823
Hawaii	1	931	465	120	198	147	563	46	787
Idaho	2	755	958	579	367	12	886	87	740
Illinois	13	32,854*	19,892*	6,653*	9,601*	3,638*	18,764*	3,164*	30,818*
Indiana	9	11,105	4,569	2,354	911	1,304	3,875	751	11,048
Iowa	6	2,620	4,719	1,976	2,053	690	4,913	204	2,222
Kansas	3	2,801	3,149	1,727	1,405*	17	3,163	185	2,822
Kentucky	4	5,230	5,416	2,355	2,125	936	5,244	515	4,887
Louisiana	3	6,710*	6,478*	3,240*	2,428*	810*	6,373*	367*	6,448*
Maine	2	2,869	1,820	992	635	193	1,579	342	2,768
Maryland <sup>3/</sup>	6	8,168	8,645	4,908	3,348*	389*	7,506	961	8,346
Massachusetts	13	17,877	12,309	6,784*	5,249*	276*	11,302	1,631	17,253
Michigan	9	19,732	7,183	3,074*	2,020*	2,069*	7,228	876	18,711
Minnesota	8	7,208	5,854*	2,359*	2,592*	903*	5,917*	553	6,592
Mississippi	2	5,404	4,133	2,348	1,313	472	3,806	384	5,367
Missouri	5	10,664	3,744	1,937	1,059	748	3,292	800	10,316
Montana	1	1,535	2,100	784	498	818	1,951	166	1,518
Nebraska	4	3,665	3,673	1,824	1,284	565	3,360	3,398	3,398
Nevada	1	480	701	441	122	138	620	38	523
New Hampshire	1	2,419	1,471	800*	483	188*	1,400	251	2,239
New Jersey	12	20,335	10,994	6,009	4,074	911	9,442	2,459	19,428
New Mexico	1	1,995	1,125	510	297	318	1,134	76	890
New York <sup>4/</sup>	24	88,457	35,704	10,711*	12,568*	12,425*	26,913	9,587	87,661
North Carolina	4	9,864	12,102	6,257	4,867*	978*	11,638	993	9,335
North Dakota	1	1,520	1,405	691	490	224	1,341	105	1,479
Ohio <sup>5/</sup>	21	22,365	17,642	8,430	7,263*	2,149*	16,475	1,902	21,830
Oklahoma	4	5,862	5,465	2,166	2,138	1,161	5,496	377	5,454
Oregon	3	3,202	3,754	1,785	1,412	557	3,761	350	2,845
Pennsylvania	20	36,882	10,664	6,570	1,632	2,462	8,594	2,994	35,958
Rhode Island	1	3,209	2,089	1,110	881*	98*	1,731	453	3,114
South Carolina	2	6,621	3,668	2,043	1,246	379	3,367	536	6,406
South Dakota	1	1,686	1,510	893	594	23	1,358	190	1,648
Tennessee	6	8,047	7,953	3,451	3,467	1,035	7,591	642	7,767
Texas	8	15,668	14,277	7,099	5,762	1,416	12,955	1,338	15,652
Utah	1	580	1,109	487	372	250	1,025	72	592
Vermont	1	1,235	751	399	333	19	642	137	1,207
Virginia	4	11,512	6,194	3,193	2,025	976	5,094	1,068	11,544
Washington	3	4,340	3,716	1,951*	1,266*	499*	3,842	363	3,851
West Virginia	5	5,172	2,946	1,411	139	1,396	2,544	514	5,060
Wisconsin	41	13,601	8,183	4,096	3,314	773	7,218	1,251	13,315
Wyoming	1	695	568	367	98	103	537	78	648

NOTE: Refer to page 10 for footnotes.

TABLE I (Continued)  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1965 1/

STATE AND COUNTY MENTAL HOSPITALS  
PERSONNEL AND FINANCIAL DATA

STATE	Average Daily Resident Patient Population	Patients Under Treatment	Total Full-time Personnel End of Year	Maintenance Expenditures		
				Total Amount	Per Resident Patient 6/	Per Patient Under Treatment 7/
United States	488,400	807,020	230,564	1,201,979,234	6.74	4.08
Alabama	7,570	11,879	1,924	9,622,994	3.48	2.22
Alaska	329	641	375	2,764,400	23.02	11.82
Arizona	1,709	3,526	678	4,260,518	7.02	3.40
Arkansas	2,998	7,123	1,620	7,853,851	7.18	3.02
California	30,463	61,030	14,187	110,909,096	9.97	4.98
Colorado	3,348	6,733	3,027	18,122,650*	14.83*	7.37*
Connecticut	8,039	17,071	3,810	24,174,928	8.24	3.88
Delaware	1,771	2,944	932	4,581,467*	7.09*	4.26*
District of Columbia	6,259	8,317	3,877	29,316,206	12.83	9.66
Florida	9,925	14,794	4,475	19,570,868	5.40	3.62
Georgia	11,982	18,789	3,120	16,487,360	3.77	2.40
Hawaii	899	1,396	390	2,904,830	8.85	5.70
Idaho	746	1,713	439	2,464,948	9.05	3.94
Illinois	36,962*	52,746*	13,508*	84,902,195	6.29*	4.41*
Indiana	11,140	15,674	5,393	27,777,194	6.83	4.86
Iowa	2,414	7,339	2,174	11,424,083*	12.97*	4.26*
Kansas	2,675	5,950	2,337	13,208,848	13.62	6.12
Kentucky	5,102	10,646	2,217*	11,352,865*	6.10*	2.92*
Louisiana	6,521	13,188*	2,772	13,489,202	5.67	2.80*
Maine	2,822	4,469	1,054	5,634,929	5.47	3.29
Maryland	8,127	16,813	3,738	22,052,153	7.43	3.59
Massachusetts	17,534	30,186	8,658	53,218,737	8.32	4.83
Michigan	19,383	26,915	6,479	53,785,277	7.60	5.67
Minnesota	6,944	13,062*	3,132	19,296,287	7.61	4.05*
Mississippi	5,307	9,537	1,820	6,150,572	3.18	1.77
Missouri	10,501	14,408	4,896	22,262,756	5.81	4.23
Montana	1,535	3,635	567	3,300,684	5.89	2.49
Nebraska	3,466	7,338	2,397	10,240,596	8.09	3.82
Nevada	498	1,181	249	1,900,000*	10.45*	4.41*
New Hampshire	2,346	3,890	992	5,201,183	6.07	3.66
New Jersey	19,951	31,329	8,946	49,561,493	6.81	4.33
New Mexico	969	2,120	472	2,638,587	7.46	3.41
New York	88,214	124,161	60,805	205,555,759*	6.38*	4.54*
North Carolina	9,651	21,966	3,874	21,091,001	5.99	2.63
North Dakota	1,495	2,925	620	3,761,073	6.89	3.52
Ohio 5/	22,033	40,207	8,749	47,341,068*	5.89*	3.23*
Oklahoma	5,658	11,327	2,708	10,666,019	5.16	2.58
Oregon	3,018	6,956	1,433	9,561,486	8.68	3.77
Pennsylvania	36,536	47,546	14,388	82,848,808	6.21	4.77
Rhode Island	3,209	5,298	1,563	8,992,065*	7.68*	4.65*
South Carolina	6,492	10,289	1,809	9,042,997	3.82	2.41
South Dakota	1,677	3,196	751	3,431,432	5.61	2.94
Tennessee	7,920	16,000	3,196	16,237,298	4.93	2.44
Texas	15,547	29,945	5,384	27,412,006	4.83	2.51
Utah	599*	1,689	430	2,716,815	12.43*	4.41
Vermont	1,243	1,986	520	3,274,552	7.22	4.52
Virginia	11,470	17,706	4,052	19,971,734	4.77	3.09
Washington	4,107	8,056	2,189	14,493,759	9.80	5.00
West Virginia	5,142	8,118	1,651	6,973,316	3.72	2.35
Wisconsin	13,504	21,784	5,285	38,248,956*	7.76*	4.81*
Wyoming	650	1,263	302	1,517,337	6.40	3.29

NOTE: Refer to page 10 for footnotes.



TABLE I (Continued)  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1965 <sup>1/</sup>  
STATE AND COUNTY MENTAL HOSPITALS  
PATIENT MOVEMENT RATIOS

STATE	Per 100,000 Civilian Population <sup>8/</sup>		Per 1,000 Average Resident Patients <sup>9/</sup>			Net Releases per 1,000 Total Admissions
	Total Admissions	Average Daily Resident Patient Population	Total Admissions	Net Releases Alive from Hospital	Deaths in Hospital	
United States	163.9	254.5	649.4	592.7	91.4	912.7
Alabama	124.9	220.2	562.3	474.2	74.1	843.3
Alaska	143.4	148.9	996.9	1,015.7	18.9	1,018.9
Arizona	111.6	107.8	1,029.1	981.4	89.5	933.7
Arkansas	200.3	153.7	1,302.9	1,374.9	74.0	1,055.3
California	154.5	166.5	895.5	909.3	62.9	1,015.4
Colorado	160.2	173.3	913.5	983.2	77.9	1,076.3
Connecticut	314.0	285.0	1,099.1	1,008.8	128.0	917.8
Delaware	236.8	356.3	685.5	640.7	103.1	936.6
District of Columbia <sup>10/</sup>	204.2	638.9	314.8	285.8	64.4	907.9
Florida	84.2	173.8	481.3	387.6	93.1	805.3
Georgia	157.0	281.1	559.5	495.0	87.5	884.6
Hawaii	71.8	138.7	341.3	655.4	53.6	1,210.8
Idaho	136.7	108.7	1,280.7	1,184.5	116.3	924.8
Illinois	187.7*	348.8*	624.8*	589.4*	99.4*	943.3*
Indiana	93.7	228.4	412.5	349.8	67.8	848.1
Iowa	171.1	87.5	1,949.2	2,029.3	84.3	1,041.1
Kansas	143.5	121.9	1,161.1	1,158.9	68.2	998.1
Kentucky	172.5	162.5	1,070.6	1,036.6	101.8	968.2
Louisiana	185.0*	186.3	984.6*	968.7*	55.8*	983.8*
Maine	186.7	289.4	645.6	560.1	121.3	887.6
Maryland	249.7	234.7	1,047.0	909.0	116.4	868.2
Massachusetts	231.9	-	709.8	643.4	92.9	918.2
Michigan	87.6	236.5	373.7	376.0	50.8	1,006.3
Minnesota	164.9*	195.7	848.4*	857.5*	80.1	1,010.8*
Mississippi	179.6	230.6	767.4	706.6	67.6	920.9
Missouri	83.8	235.0	356.9	313.8	76.3	879.3
Montana	301.7	220.5	1,375.2	1,277.7	108.7	929.0
Nebraska	251.7	237.6	1,039.9	951.3	164.2	914.8
Nevada	162.3	115.3	1,396.4	1,235.1	75.7	884.5
New Hampshire	222.2	354.4	631.6	601.1	107.8	951.7
New Jersey	163.3	296.3	553.0	474.9	123.7	858.8
New Mexico	111.7	96.2	1,193.0	1,202.5	101.8	1,008.0
New York	198.0	489.3	405.5	305.6	108.9	753.8
North Carolina	251.0	200.2	1,240.6	1,212.3	103.4	961.7
North Dakota	219.5	233.6	936.7	894.0	70.0	954.4
Ohio <sup>5/</sup>	174.5	215.5	807.4	745.5	86.1	923.4
Oklahoma	223.2	231.1	965.9	971.4	66.6	1,005.7
Oregon	198.2	159.3	1,241.4	1,243.7	115.7	1,001.9
Pennsylvania	92.7	317.6	292.8	236.0	82.2	805.9
Rhode Island	233.4	358.5	660.7	547.4	143.3	828.6
South Carolina	147.4	260.9	563.1	513.8	82.3	912.5
South Dakota	217.0	240.9	905.8	814.6	114.0	899.3
Tennessee	208.4	207.5	1,005.8	960.0	81.2	954.5
Texas	137.5	149.7	911.7	827.3	85.4	907.4
Utah	112.6	60.8*	1,892.5	1,749.1	122.9	924.3
Vermont	189.2	313.1	615.1	525.8	112.2	854.9
Virginia	144.2	267.1	537.3	441.9	92.6	822.4
Washington	126.9	140.2	907.2	938.0	88.6	1,033.9
West Virginia	162.7	283.9	575.8	497.3	100.5	863.5
Wisconsin	197.7	326.2	608.0	536.3	93.0	882.1
Wyoming	169.6	194.0	845.2	799.1	116.1	945.4

NOTE: Refer to page 10 for footnotes.

1/ These data were taken from the 1965 Preliminary Survey of public mental hospitals. Exceptions are given in footnotes.

2/ Net releases are defined as the net number of patients released alive from the hospital in any one year.

3/ Maryland: "Admissions with prior admissions to hospitals in the same state system" and "all other admissions" public mental hospital data from Maryland for the 1964 Census of Patients in Mental Institutions were used as a basis for pro-rating the 1965 total admissions between these two categories.

4/ New York: "Admissions with prior admissions to hospitals in the same state system" and "all other admissions" public mental hospital data from New York for the 1964 Census of Patients in Mental Institutions were used as a basis for pro-rating the 1965 total admissions between these two categories.

5/ Ohio: Effective July 1, 1961, two of the facilities in Ohio (formerly classified as state hospitals for mentally ill) were designated as public institutions for the mentally-retarded. Mentally ill patients in these two facilities (i.e. a total of 116 average daily resident patients) were reported and are included in the above table. However, personnel and financial data corresponding to these mentally ill patients are not available. In addition, one other facility classified as a mental hospital has mentally ill and mentally retarded patients. For this facility only the number of mentally ill patients was reported, thus excluding the number of mentally retarded patients. However, the personnel and financial data reported pertained to all patients in the hospital.

6/ Per resident patient maintenance expenditures are based on the average daily resident patient population of hospitals reporting expenditures.

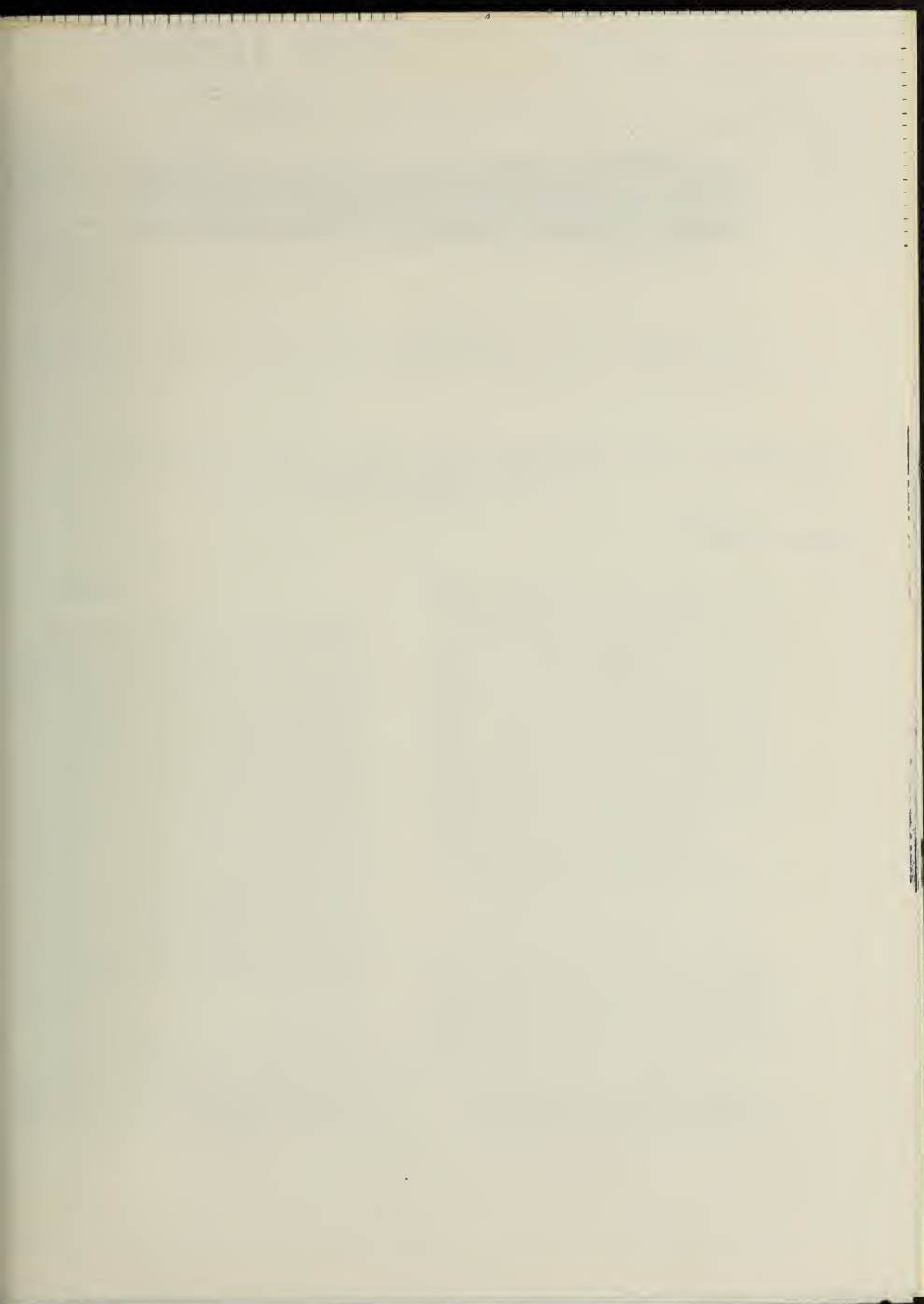
7/ Per patient under treatment maintenance expenditures are based on the patients under treatment for hospitals reporting expenditures.

8/ Admission and average daily resident patient rates are per 100,000 estimated civilian population. Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 317. Provisional estimate for July 1, 1965.

9/ These ratios are based on the average of the beginning and end of year resident patient population.

10/ District of Columbia: Since a substantial proportion of the patients at the St. Elizabeths Hospital are non-residents of the District of Columbia, total admission and resident patient rates per 100,000 population are computed only for residents of the District of Columbia. District residents include 1,611 total admissions and 5,041 average daily resident patients.

Symbols used: \* Indicates data which are estimates or include estimates.



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## CURRENT FACILITY REPORTS

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

January 1967

Chevy Chase, Maryland 20203

Series MHB-H-11

PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA  
STATE AND COUNTY MENTAL HOSPITALS  
UNITED STATES

1966

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## I. PURPOSE

Since the passage of the National Mental Health Act by Congress in 1946, the National Institute of Mental Health has been responsible for collecting and publishing data on the hospitalized mentally ill in the United States--data necessary to answer requests from members of Congress, State legislators, project planners, hospital administrators and other persons interested in the field of mental illness. These data are extremely useful, for example, in planning for facilities and services, research and training, and legislation and financing. In an effort to provide current data, the provisions survey statistics tabulated in these Mental Health Statistics--Current Facility Reports (Series MHB-H) are collected and published annually for certain patient movement and administrative categories, by state, for the state and county mental hospitals. Similar data are published for the Public Institutions for the Mentally Retarded (Series MHB-I) and Outpatient Psychiatric Clinics (Series MHB-J).

Certain trend data for the United States, covering the period 1960 through 1966 may be found in Table A. A graph depicts trends for some of the patient movement categories from 1950 through 1966. The data, by state for the current year, fiscal

1966, are found in Table 1. These data were obtained from the 1966 "Preliminary Survey of State and County Mental Hospitals". As these data are provisional, they are subject to some change. Data in greater detail--admissions with no prior psychiatric patient experience and resident patients by age, sex and mental disorder; personnel by occupation; maintenance expenditure by type--will appear in a future NIMH publication. Similar data for patients in the private mental hospitals, general hospitals with psychiatric services and outpatient psychiatric clinics will be available in other publications of the National Institute of Mental Health.

## II. DESCRIPTION AND LIMITATIONS OF THE DATA

## A. Patient Movement Data

The summary data presented in this report may be used to analyze the annual changes in year and populations of the state and county mental hospitals in terms of three categories of patient movement (admissions, net releases and deaths). These categories are defined as follows:

1. Admissions: This category includes three admission classifications. Admissions With No Prior Psychiatric

Inpatient Experience includes patients admitted to hospitals with no record of prior admission to any inpatient psychiatric facility either within or outside the state system. The state system is defined to include state and county mental hospitals and public institutions for the mentally retarded. This category replaces the former classification, first admissions, which was defined as "a patient who has not previously been admitted to a public or nonpublic hospital authorized for the treatment of mental disorders." The major difference between these two definitions lies in the area of psychiatric services in general hospitals. In using the first admission definition, some states did not consider prior psychiatric treatment in a general hospital as constituting a previous psychiatric admission. Under the present definition such cases are considered as having a prior admission to an inpatient psychiatric facility. Therefore, the number of admissions with no prior inpatient psychiatric experience will either be less than or equal to the number of first admissions (old definition). Admissions With Prior Admission to Hospitals in Same State System are patients admitted to the hospital with a history of prior admission to a public mental hospital or a public institution for mentally retarded in the same state. All Other Admissions include patients admitted to the hospital with prior admission to other inpatient psychiatric facilities--state psychiatric facilities in other states, Veterans Administration hospitals, private mental hospitals, private institutions for the mentally retarded, and any other inpatient psychiatric facilities (including psychiatric services in general hospitals) which are medical facilities accepting patients for screening and/or treatment of psychiatric disorders.

2. Net Releases Alive from Hospital The concept of "net release alive from hospital" takes into account movement of patients into and out of the hospital since this quantity is the number of placements on extramural care plus direct discharges from the hospital less the number of returns from extramural care, all occurring during any one year. National data on placements and returns from extramural care are not available but net releases may be computed from less detailed movement data as:

$$\left[ \begin{array}{c} \text{Net} \\ \text{Releases} \\ \text{Alive from} \\ \text{Hospital} \end{array} \right] = \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{Beginning} \\ \text{of Year} \end{array} \right] + \left[ \begin{array}{c} \text{All Admis-} \\ \text{sions} \\ \text{excluding} \\ \text{Transfers} \end{array} \right] - \left[ \begin{array}{c} \text{Deaths} \\ \text{in} \\ \text{Hospital} \end{array} \right] - \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{End of} \\ \text{Year} \end{array} \right]$$

Interpretation of net releases alive from hospital should be made with caution. This quantity is the net number of releases alive from the state hospital system and includes not only direct discharges to the community and placement on leave but also direct discharges to other inpatient facilities outside the state system such as Veterans Administration hospitals, nursing homes, boarding care homes, and mental hospitals in other states. The number of net releases is used as a measure of movement out of the hospital rather than the total number of discharges because many discharges occur while patients are already outside the hospital on extramural care. The number of net releases may be considered an estimate of the number of effective releases from the hospital under the assumption that subtracting returns from leave during the year removes only the short term visits, leaves, and escapes and retains the effective releases; i.e., those from which the patients did not return to the hospital within the time period covered.

3. Deaths in Hospital This category includes only deaths occurring to patients resident in the hospital and does not include deaths among patients on leave even though these patients are still on the hospital books.

4. Patient Movement Ratios per 100,000 Civilian Population The admission ratio measures the proportion of people coming under care during the year while the average daily resident patient ratio measures the average proportion of the population under care at any one time during the year.

5. Patient Movement Ratios per 1,000 Average Resident Patients These ratios relate the average resident population to three movement categories: Total admissions, Net releases and Deaths, thus providing indexes of the amount and type of patient movement activity that occurred during the year. It should be kept in mind that the ratios shown in this publication are based on totals and as such they have the limitations of totals since they are not standardized for such important variables as age, sex, diagnosis, and years of hospitalization. To illustrate how these ratios are descriptive of changes in resident patient populations, consider the following hypothetical example: Suppose that the resident patient populations in State A and State B each decreased by 0.6 percent (or 6 per 1,000).

Considering only these data gives a limited and potentially misleading view of patient movement activity. However, now suppose that the patient movement ratios are computed to be the following:

Movement Category	State A	State B
Admissions	323.7	522.2
Net Releases	229.5	454.8
Deaths	99.9	73.5

These ratios show that State B has much higher rates of patient movement into and out of the hospital than State A. While these ratios highlight areas of difference between the two states, conclusions based only on these ratios may be fallacious. The differences can be isolated further by analyzing the data in terms of the patient characteristics mentioned above (age, sex, diagnosis, and years of hospitalization). Even at this point, one cannot evaluate the relative efficacy of the two state mental hospital programs since differences in patient movement ratios between states may also be attributable to a great many other factors, such as policies and laws controlling admissions and release, the ways in which the mental hospitals are utilized by the communities they serve, the types of patients admitted, the various treatment programs within the hospitals, and the availability of various community facilities that can serve as adjuncts or alternatives to hospitalization. Since the reasons for interstate differences in these movement ratios are complex and vary considerably from hospital to hospital within and between states, ratios constructed from gross movement data (i.e. state totals) can not be used to measure the therapeutic effectiveness of various hospital programs.

6. Ratio of Net Releases to 1,000 Admissions The ratio "net releases per 1,000 admissions" is a convenient index for summarizing the live net movement into and out of the hospital. For example, if the ratio is less than 100, there were more admissions than net releases. Note that this index does not relate net releases to admissions in the sense of a percent or rate because not all releases during a year derive from the admissions during that year. Some of these net releases occurred to patients with lengths of stay greater than one year, that is, patients admitted during some prior year.

## B. Expenditure Ratios

The expenditure per average daily resident patient has been the most commonly used ratio for comparing mental hospital expenditures. Its major limitation is that it does not adequately take into account the number of admissions for which a large share of the expenditure is required. If the patient base is enlarged to include admissions during the year the resulting sum is the best available estimate of patients under treatment during the year. This quantity is actually defined as:

$$\left[ \begin{array}{c} \text{Patients} \\ \text{Under} \\ \text{Treatment} \end{array} \right] = \left[ \begin{array}{c} \text{Resident} \\ \text{Patient} \\ \text{Beginning} \\ \text{of Year} \end{array} \right] + \left[ \begin{array}{c} \text{All Admis-} \\ \text{sions} \\ \text{excluding} \\ \text{Transfers} \end{array} \right] + \left[ \begin{array}{c} \text{Returns from Leave} \\ \text{among Patients on} \\ \text{Leave Beginning} \\ \text{of Year} \end{array} \right]$$

The estimate, however, does not include the last category, Returns from Leave, since these data are not available nationally.

The ratio of expenditures to patients under treatment appears to be a more realistic measure, but it does not solve the problem completely. While a larger share of the expenditures is required for the care of admissions, the index weights both admissions and resident patients equally.

The expenditure figures and ratios are not necessarily expenditures by state agencies alone inasmuch as county expenditures for the care of patients in the mental hospitals are included for Maryland, Michigan, New Jersey, Tennessee and Wisconsin, the only states with county mental hospitals. County data have been included to insure greater comparability among states in expenditures per patient.

## C. Interstate Variation

Considerable variation among states in patient movement, personnel, and expenditure data is indicated in Table 1.

Actual numbers are not comparable among states since they do not take into account differences in size of population. Therefore, ratios have been computed for several data categories.

For example, net releases and total admissions per 1,000 average resident patients show considerable variation, with net release rates ranging from 229 to 2,845. Rates of admission and resident patients end of year per 100,000 civilian population also vary considerably for State to State. In addition, a high of \$12.62 per patient under



treatment per day to a low of \$1.91 further points out the considerable variation existing among states.

However, as has been emphasized in Sections A4-A6, comparison of state ratios, while serving to highlight areas of differences, are limited. More detailed classifications of movement categories by such variables as age, sex, diagnosis and time on books are needed. Data on age, sex, and diagnosis as well as more detail on personnel and maintenance expenditures will be available in the near future. This detail will provide partial explanations of the gross differences noted in the above tables. Also, as mentioned previously, other factors such as policies and laws affecting admission and release of patients, other community treatment facilities, effectiveness of therapeutic programs, etc., must be evaluated to determine the extent of their influence on interstate variation.

### III. TRENDS

For the 11th consecutive year, the RESIDENT PATIENT POPULATION in the State and county mental hospitals has decreased from 559,000 in 1955 to 452,000 in 1966 or a drop of 19% during the 11 year period. The 4.4 percent decrease in resident patients during fiscal 1966 was the largest single year decline ever and was double the decrease in resident patients that occurred between 1960 and 1961. This has occurred in spite of increases in the general population. Prior to 1956, the trend had been one of increasing numbers of residents, with the exception of only one year (1943) which saw a slight decrease.

Correspondingly, the number of NET RELEASES has continued to climb--a trend which began in the mid 1940's. In 11 years (1955-1966), the number has more than doubled. In 1966, there were 311,827 net releases as compared with 126,498 in 1955.

Along with increasing numbers of net releases and decreasing numbers of resident patients, the number of TOTAL ADMISSIONS has increased steadily, continuing another trend which began in the mid 1940's. In 1966, the number of admissions was approximately 330,000. This has resulted in a 1966 admission rate of 171 patients per 100,000 civilian population, compared with 110 in 1955.

The number of DEATHS in the hospitals has fluctuated--over the years. In 1966,

43,000 deaths were reported. This is the lowest number of deaths reported in the last 11 years.

There are more than 205,000 FULL TIME PERSONNEL caring for the mentally ill in our 297 State and county hospitals. The ratio of personnel per patients has been an ever increasing one and in 1966 it reached one full time employee for every 2.2 patients.

The MAINTENANCE EXPENDITURES for the care of these patients have also greatly increased--going over a billion dollars in 1962--and still climbing. Converting these data into ratios, in 1966, \$4.43 was spent each day per patient under treatment as compared with \$2.33 in 1955.

Trends in certain patient movement categories are depicted graphically for 1950-1966 on page 5. These trends, as well as others, are indicated numerically for the years 1960-1966 in Table A and include estimates for underreporting wherever possible. Therefore, these totals, which are the most complete available, supersede totals published in prior reports. Also shown in Table A are the same data expressed as index numbers where 1960 is the base year. Thus, percent change since 1960 can be read directly from Table A with increases being numbers greater than 100 and decreases being numbers less than 100. For instance, the 1962 index number for admissions is 114.9. This means that admissions in that year were 14.9 percent greater than 1960 admissions. An index number is computed by dividing each of the observed numbers by the corresponding number in the base time period for each movement and administrative data category. The year 1960 was selected as the base year primarily because the number of resident patients, admissions, net releases, and death data were not atypical. Percentage change between the data for any two years other than 1960 may be computed by obtaining the difference between two index numbers concerned and dividing this difference by the index number for the earlier year. For example, the index numbers for net releases in 1963 and 1964 are 127.4 and 139.3. The percent change between 1963 and 1964 is given by:

$$\frac{139.3 - 127.4}{127.4} = \frac{11.9}{127.4} = 9.34$$

Therefore, there was a 9.3 percent increase in net release between 1963 and 1964.



NUMBER OF RESIDENT PATIENTS, TOTAL ADMISSIONS, NET RELEASES, AND DEATHS,  
STATE AND COUNTY MENTAL HOSPITALS, UNITED STATES, 1950-1966

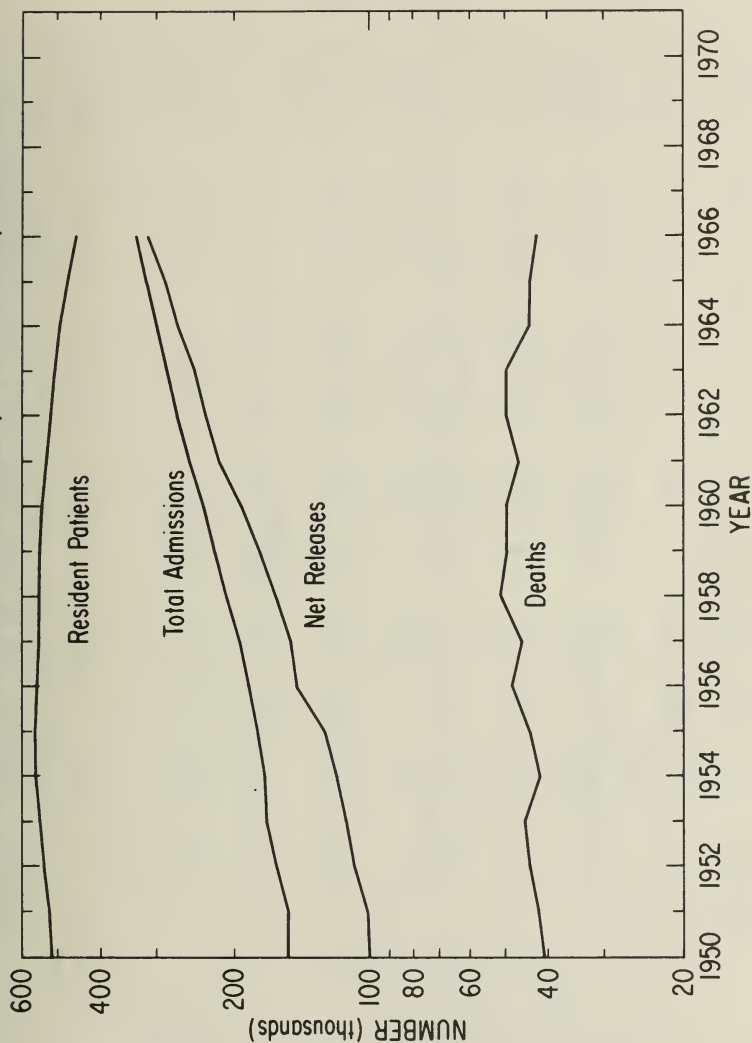


TABLE A  
RECENT TRENDS OF PATIENT MOVEMENT AND ADMINISTRATIVE DATA, STATE AND COUNTY MENTAL HOSPITALS  
UNITED STATES, 1960 - 1966

ITEM	1960	1961	1962	1963	1964	1965	1966
All Admissions	234,791	252,742	269,854	285,591	299,561	314,027	330,399
Net Releases	192,818	215,596	230,158	245,745	268,616	285,760	311,827
Deaths in Hospital	49,748	46,880	49,563	49,052	44,824	43,964	42,644
Resident Patients End of Year	535,540	527,456	515,640	504,604	490,449	475,202	452,329
Personnel (full time) at End of Year	181,957	187,150	190,433	195,356	202,614	205,019	205,287
Maintenance Expenditures Per Resident Patient	\$916,236,166	\$974,614,297	\$1,033,567,684	\$1,081,557,167	\$1,144,024,206	\$1,204,345,256	\$1,300,622,459
Per Day	1,702.41	1,836.42	1,998.24	2,131.49	2,304.63	2,503.05	2,822.72
Per Patient under Treatment	4.65	5.03	5.47	5.84	6.30	6.86	7.73
Per Year	1,177.52	1,233.80	1,299.87	1,352.93	1,423.11	1,502.27	1,617.87
Per Day	3.22	3.38	3.56	3.71	3.89	4.12	4.43

INDEX NUMBERS

All Admissions	100.0	107.6	114.9	120.8	127.6	133.7	140.7
Net Releases	100.0	111.8	119.4	127.4	139.3	148.2	161.7
Deaths in Hospital	100.0	94.2	99.6	98.6	90.1	88.4	85.7
Resident Patients End of Year	100.0	98.5	96.3	94.2	91.6	88.7	84.5
Personnel (full time) at End of Year	100.0	102.9	104.7	107.4	111.4	112.7	112.8
Maintenance Expenditures Per Resident Patient	100.0	106.4	112.8	118.0	124.9	131.4	142.0
Per Day	100.0	107.9	117.4	125.2	135.4	147.0	165.8
Per Patient under Treatment	100.0	108.2	117.6	125.6	135.5	147.5	166.2
Per Year	100.0	104.8	110.4	114.9	120.9	127.6	137.4
Per Day	100.0	105.0	110.6	115.2	120.8	128.0	137.6

TABLE 1

PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1966

## STATE AND COUNTY MENTAL HOSPITALS

## PATIENT MOVEMENT DATA

STATE	Number of Hospitals	Resident Patients Beginning of Year	Admissions (excluding transfers)				Net Releases Alive from Hospital	Deaths in Hospital	Resident Patients End of Year
			Total	No Prior Psych. Inpatient Experience	With Prior Admis. to Hosp. in Same System	All Other			
United States	297	476,401	330,399	150,702	124,743	54,954	311,827	42,644	452,329
Alabama	2	7,691	4,460	2,726	1,589	145	3,884	552	7,715
Alaska	2	310	353	222	107	24	351	9	303
Arizona	1	1,690	2,123	1,116	417	590	2,126	218	1,469
Arkansas	3	2,779	4,454	2,470	1,302	682	4,692	188	2,353
California	12	30,318	27,855	11,197	11,587	5,071	29,726	1,789	26,658
Colorado 1/	3	3,934	4,754	1,677	1,182	1,895	4,802	231	3,655
Connecticut	3	7,908	8,810	3,901	4,246*	663*	8,492	953	7,273
Delaware	2	1,667	1,426	917	469	40	1,341	156	1,596
District of Col. 2/	1	6,131	2,162	539*	666*	957*	1,883	486	5,924
Florida	4	9,992	4,865	1,942	1,361	1,562	4,081	921	9,855
Georgia	2	11,823	6,783	5,105	1,471*	207*	6,166	1,151	11,289
Hawaii	1	765	484	129	197	158	420	39	790
Idaho	2	740	832	559	265*	8*	769	84	719
Illinois	15	30,837*	22,134*	6,942*	11,453*	3,739*	21,450*	3,206*	28,315*
Indiana	9	11,048	4,944	2,493	1,515	936	4,296	754	10,942
Iowa	6	2,220	5,249	2,211	2,319	719	5,601	151	1,717
Kansas	3	2,622	3,116	1,725	1,050	341	3,167	139	2,432
Kentucky	4	4,887	5,557	2,383	2,214	960	5,094	606	4,744
Louisiana	3	6,449	6,657*	3,292*	2,514*	851*	6,774*	383*	5,949*
Maine	3	2,819	1,870	1,044	607	219	1,629	305	2,755
Maryland 3/	6	8,731	9,816	5,355	4,461	9,276	1,012	8,259	
Massachusetts	13	17,253	12,155	6,717*	4,996*	442*	11,549	1,660	16,199
Michigan	9	18,711	8,767	3,606*	2,462*	2,699*	9,368	1,031	17,079
Minnesota	8	6,592	6,002*	2,402*	2,710*	890*	6,169*	519	5,906
Mississippi	2	5,584	4,022	2,307	1,269*	446*	3,801	359	5,446
Missouri	7	10,466	6,532	3,526	1,873	1,133	6,283	782	9,933
Montana	1	1,518	2,048	806	449	793	1,980	173	1,413
Nebraska	4	3,327	2,598	1,000	1,017	581	2,540	289	3,096
Nevada	1	516	858	572*	150	136*	776	30	568
New Hampshire	1	2,239	1,459	788	524	147	1,326	202	2,170
New Jersey	12	19,428	12,331	6,481	4,816	1,034	10,722	2,291	18,746
New Mexico	1	890	1,168	492	345	331	1,292	71	695
New York	24	86,775	36,945	10,751*	12,931	13,263*	30,806	9,080	83,834
North Carolina	4	9,334	13,034	6,554	5,495*	985*	12,423	1,126	8,819
North Dakota	1	1,479	1,400	678	535	187	1,362	93	1,424
Ohio	21	21,830	18,878	8,938	7,687*	2,253*	17,409	1,860	21,439
Oklahoma	4	5,454	5,168	2,435	1,744	989	5,503	390	4,729
Oregon	3	2,855	4,126	2,429	1,217*	480*	4,122	282	2,577
Pennsylvania 4/	20	35,966	10,021	5,960	1,680	2,381	8,116	2,800	35,071
Rhode Island 5/	1	3,164	2,116	1,124	992	-	2,762	238	2,280
South Carolina	2	6,406	3,352	1,857	1,085	412	3,095	546	6,119
South Dakota	1	1,648	1,374	802	555	17	1,321	153	1,548
Tennessee	6	7,767	8,393	3,605	3,827	961	8,123	671	7,366
Texas	8	15,652	14,683	7,040	6,166	1,477	13,326	1,295	15,714
Utah	1	592	1,019	465	367	187	1,015	64	532
Vermont	1	1,207	755	389	366	-	642	145	1,175
Virginia	4	11,544	6,453	3,240	2,009*	1,204*	5,518	1,109	11,370
Washington	3	3,820	3,694	1,466	1,578*	650*	3,657	359	3,498
West Virginia	5	5,060	3,087	1,586	1,231	270	2,644	498	5,005
Wisconsin	41	13,315	8,866	4,383	3,593	710	7,592	1,132	13,277
Wyoming	1	648	569	358	82	129	565	63	589

NOTE: Refer to page 10 for footnotes

TABLE 1 (Continued)  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1966 <sup>1/</sup>

STATE AND COUNTY MENTAL HOSPITALS

PERSONNEL AND FINANCIAL DATA

STATE	Average Daily Resident Patient Population	Patients under Treatment	Total Full-time Personnel End of Year	Maintenance Expenditures		
				Total Amount	Daily Expenditures	
					Per Resident Patient <sup>2/</sup>	Per Patient under Treatment <sup>3/</sup>
United States	460,910	806,800	205,234	\$1,300,622,459	7.73	4.43
Alabama	7,663	12,151	2,040	11,142,966	3.98	2.51
Alaska	316	663	346*	3,054,600*	26.48*	12.62*
Arizona	1,605	3,813	719	5,197,074	8.87	3.73
Arkansas	2,552	7,233	1,567	7,820,618	8.40	2.96
California	27,306	58,173	14,293	116,340,115	11.67	5.48
Colorado <sup>1/</sup>	2,871	8,688	3,161	19,049,740*	18.18*	8.70*
Connecticut	7,572	16,718	3,764	27,093,992	9.80	4.44
Delaware	1,638	3,093	1,043	5,065,779	8.47	4.49
District of Columbia <sup>2/</sup>	6,037	8,293	3,836	29,973,473	13.60	9.90
Florida	9,831	14,857	4,739	21,774,719	6.07	4.02
Georgia	11,478	18,606	3,344	22,960,751*	5.48*	3.38*
Hawaii	796	1,249	403	3,160,199	10.88	6.93
Idaho	735	1,572	485	2,973,987	11.09	5.18
Illinois	29,779	52,971*	12,670*	98,007,198*	9.02*	5.07*
Indiana	10,952	15,992	5,227	30,935,231	7.74	5.30
Iowa	1,972	7,469	2,001	11,674,804*	16.22*	4.28*
Kansas	2,443	5,738	2,283	13,531,438	15.17	6.46
Kentucky	4,774	10,444	2,208	12,988,894	7.45	3.41
Louisiana	6,199	13,106*	2,711	14,521,576	6.42	3.04
Maine <sup>8/</sup>	2,780	4,689	1,100	6,246,114	6.26	3.72
Maryland	8,201	18,547	3,857	25,705,470	8.59	3.80
Massachusetts <sup>2/</sup>	16,748	29,408	8,648	56,238,768	9.20	5.24
Michigan	17,923	27,478	7,048	56,429,081	8.63	5.63
Minnesota	6,289	12,594	3,224	19,346,092	8.43	4.21
Mississippi	5,485	9,606	1,746	6,693,656	3.34	1.91
Missouri	10,209	16,998	5,298	27,658,264*	7.42*	4.46*
Montana	1,481	3,566	595	3,554,902	6.58	2.73
Nebraska	3,252	5,925	2,392	11,217,260	9.45	5.19
Nevada	553	1,374	260	1,976,069	9.79	3.94
New Hampshire	2,222	3,698	980	5,651,553	6.97	4.19
New Jersey	19,119	31,759	9,172	53,769,858	7.71	4.64
New Mexico	718	2,058	465	3,035,851	11.58	4.04
New York	85,087	123,720	34,873	218,355,575	7.03	4.84
North Carolina	9,034	22,368	4,009	23,689,336	7.18	2.90
North Dakota	1,462	2,879	651	4,019,375	7.53	3.82
Ohio <sup>2/</sup>	21,789	40,708	8,538	50,572,034	6.38	3.41
Oklahoma	5,091	10,622	2,645	12,034,367	6.48	3.10
Oregon	2,689	6,981	1,435	9,273,516	9.45	3.64
Pennsylvania <sup>10/</sup>	35,635	45,987	14,793	91,148,675	7.01	5.43
Rhode Island <sup>4/</sup>	1,989	5,280	942	7,417,053	10.22	3.85
South Carolina	6,288	9,760	1,898	10,108,205	4.40	2.84
South Dakota	1,621	3,022	784	3,658,073	6.18	3.32
Tennessee	7,495	16,160	3,038	15,270,161	5.58	2.59
Texas	15,462	30,335	5,625	28,857,275	5.11	2.61
Utah	550	1,611	485	2,700,621	13.45	4.59
Vermont	1,160	1,962	530	3,101,859	7.33	4.33
Virginia	11,469	17,997	3,924	20,254,961	4.84	3.08
Washington	3,680	7,514	2,211	15,210,628	11.32	5.55
West Virginia	5,007	8,147	1,688	8,226,230	4.50	2.77
Wisconsin	13,293	22,001	5,202*	98,829,425*	8.21*	4.96*
Wyoming	610	1,217	348	2,085,000	9.36	4.69

NOTE: Refer to page 10 for footnotes



TABLE 1 (Continued)

PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, 1966

## STATE AND COUNTY MENTAL HOSPITALS

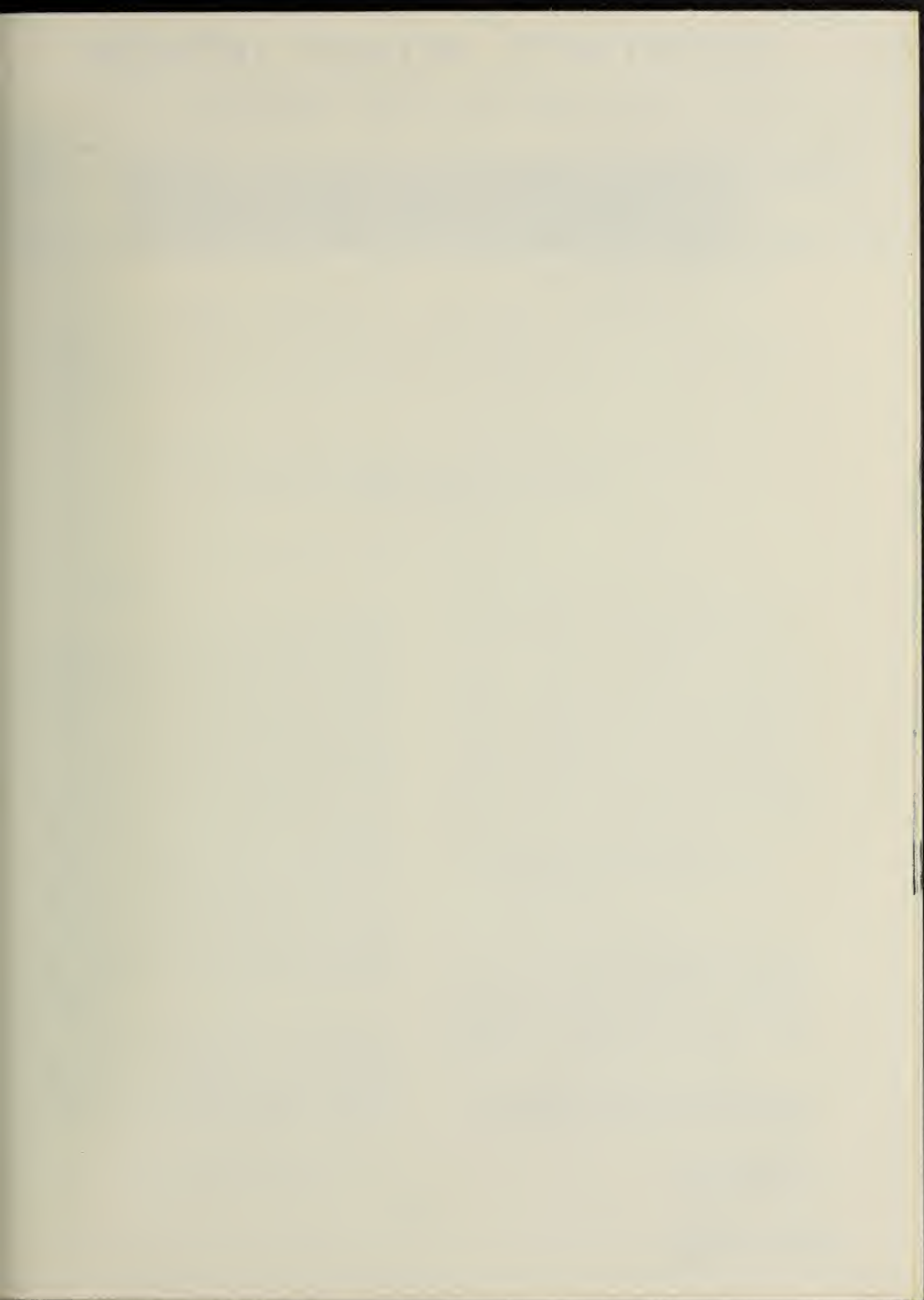
## PATIENT MOVEMENT RATIOS

STATE	Rate per 100,000	Civilian Population <sup>11/</sup>	Per 1,000 Average Resident Patients <sup>12/</sup>			Net Releases per 1,000 Total Admissions
	Total Admissions	Resident Patients at End of Year	Total Admissions	Net Releases Alive from Hospital	Deaths in Hospital	
United States	171.4	233.5	711.5	671.5	91.8	943.8
Alabama	128.4	221.5	579.0	504.2	71.7	870.9
Alaska	148.3	125.7	1,149.8	1,143.3	29.3	994.3
Arizona	134.7	91.9	1,343.7	1,345.6	138.0	1,001.4
Arkansas	229.7	120.9	1,735.8	1,828.5	73.3	1,053.4
California	152.2	143.9	977.8	1,043.5	62.8	1,067.2
Colorado <sup>1/</sup>	246.4	188.3	1,252.7	1,265.3	60.9	1,010.1
Connecticut	310.0	254.0	1,160.6	1,118.7	125.5	963.9
Delaware	284.6	316.0	873.8	821.7	95.6	940.4
District of Col. <sup>2/</sup>	224.4	628.8	358.7	312.4	80.6	871.0
Florida	84.3	168.7	490.2	411.2	92.8	838.8
Georgia	156.9	259.5	587.0	533.6	99.6	909.0
Hawaii	73.1	118.4	422.1	339.8	50.1	867.8
Idaho	120.9	104.4	1,139.7	1,053.4	115.1	924.3
Illinois	208.3*	265.6*	748.4*	725.3*	108.4*	969.1*
Indiana	101.0	222.9	449.7	390.7	68.6	868.9
Iowa	190.7	62.5	2,665.8	2,844.6	76.7	1,067.1
Kansas	140.5	109.6	1,233.1	1,253.3	55.0	1,016.4
Kentucky	177.2	151.1	1,153.9	1,057.7	125.8	916.7
Louisiana	187.9*	167.0*	1,073.9*	1,092.8*	61.8*	1,017.6*
Maine	193.2	284.9	671.0	584.5	109.4	871.1
Maryland	279.7	233.1	1,155.5	1,091.9	119.1	945.0
Massachusetts	228.0	303.2	726.7	690.5	99.2	950.1
Michigan	105.3	204.5	489.9	523.5	57.6	1,068.6
Minnesota	168.5*	165.4	960.3*	987.2*	83.1	1,027.8*
Mississippi	175.4	236.9	729.3	689.2	65.1	945.1
Missouri	146.3	222.2	640.4	616.0	76.7	961.9
Montana	255.1	203.6	1,397.0	1,350.6	118.0	966.8
Nebraska	180.2	214.7	808.8	790.8	90.0	977.7
Nevada	196.8	127.4	1,583.0	1,431.7	55.4	904.4
New Hampshire	217.4	321.5	661.7	601.4	91.6	908.8
New Jersey	181.6	273.9	646.0	561.7	120.0	869.5
New Mexico	117.0	69.4	1,472.9	1,629.3	89.5	1,106.2
New York	203.6	460.1	433.1	361.1	106.4	833.8
North Carolina	268.0	180.6	1,435.9	1,368.6	124.0	953.1
North Dakota	219.1	223.2	964.2	938.0	64.0	972.9
Ohio	184.1	208.4	872.6	804.7	86.0	922.2
Oklahoma	213.8	195.4	1,014.9	1,080.7	76.6	1,064.8
Oregon	212.6	132.2	1,519.1	1,517.7	103.8	999.0
Pennsylvania <sup>4/</sup>	86.7	303.3	282.1	228.5	78.8	809.9
Rhode Island	242.1	260.3	777.4	1,014.7	87.4	1,305.3
South Carolina	134.3	244.2	535.5	494.2	87.2	922.8
South Dakota	202.7	229.0	859.8	826.7	95.7	961.4
Tennessee	218.7	191.2	1,109.2	1,073.5	88.7	967.8
Texas	139.9	148.8	936.2	869.7	82.6	907.6
Utah	102.2	53.0	1,813.2	1,806.0	113.9	996.1
Vermont	186.4	290.1	633.9	539.0	121.7	850.3
Virginia	150.0	262.5	563.2	481.6	96.8	855.1
Washington	126.4	119.5	1,009.4	999.5	98.1	990.0
West Virginia	171.0	279.0	613.4	525.3	98.9	856.5
Wisconsin	209.5	319.4	653.3	571.0	85.1	874.1
Wyoming	175.1	181.2	919.2	912.8	101.8	993.0

NOTE: Refer to page 10 for footnotes

- 1/ Colorado: Fort Logan Mental Health Center's data on personnel and maintenance expenditures are unavailable and, therefore, the maintenance expenditure ratios for Colorado, exclude Fort Logan (Fort Logan reported 2,686 patients under treatment). Resident patient and admission data include all patients active on the books. (Inpatient, Family Care, Halfway House, Evening Hospital, Outpatient).
- 2/ District of Columbia: Since a substantial proportion of the patients at Saint Elizabeths Hospital are non-residents of the District of Columbia, total admissions and resident patient rates per 100,000 population are computed only for residents of the District of Columbia. District residents include 1,773 total admissions and 4,980 resident patients.
- 3/ Maryland: Data only collected for the classifications "First Admission" and "Readmission".
- 4/ Rhode Island: A major reorganization of services within the Rhode Island Medical Center produced unusually large changes in the data for some of the movement categories compared with those for previous years.
- 5/ Per resident patient maintenance expenditures are based on the average daily resident patient population of hospitals reporting expenditures.
- 6/ Per patient under treatment maintenance expenditures are based on the patients under treatment (resident patients beginning of year plus total admissions) for hospitals reporting expenditures.
- 7/ Massachusetts: Personnel data for Massachusetts and the personnel and financial data for Massachusetts Correctional Institute are unavailable. Data shown are for the year 1965.
- 8/ Maine: Pineland Hospital & Training Center is a dual purpose institution. Only data pertaining to the mentally ill patients are reported here. Data on maintenance expenditures are unavailable and, therefore, the maintenance expenditure ratios for Maine exclude Pineand Hospital (Pineand Hospital reported 85 patients under treatment).
- 9/ Ohio: Data on personnel and maintenance expenditures are unavailable for two facilities (Apple Creek and Mt. Vernon Hospitals) and, therefore, the maintenance expenditure ratios for Ohio exclude these two. (These hospitals reported 86 patients under treatment). Springview Hospital is a dual purpose institution. Only data pertaining to the mentally ill patients are reported. The personnel and maintenance expenditure data, however, pertain to all patients in the hospital.
- 10/ Pennsylvania: Western State School and Hospital is a dual purpose institution. Only data pertaining to the mentally ill patients are reported here. Data on personnel and maintenance expenditures are unavailable and, therefore, the maintenance expenditure ratios for Pennsylvania exclude Western State School and Hospital (Western State School and Hospital reported 32 patients under treatment).
- 11/ Admission and resident patient rates are per 100,000 estimated civilian population. Source: U. S. Bureau of the Census, Current Population Reports, Series P-25, No. 546, provisional estimate for 1965.
- 12/ Average resident patient rates are based on the average of the beginning and end of year resident patient population.

Symbols used: \* indicates data which are estimates or include estimates;



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# MENTAL HEALTH STATISTICS

## CURRENT FACILITY REPORTS

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

NATIONAL CLEARINGHOUSE FOR MENTAL HEALTH INFORMATION

January, 1968

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Series MHB-H-12

### PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA STATE AND COUNTY MENTAL HOSPITALS UNITED STATES

July 1, 1966 - June 30, 1967

#### I. PURPOSE

Since the passage of the National Mental Health Act by Congress in 1946, the National Institute of Mental Health has been responsible for collecting and publishing data on the hospitalized mentally ill in the United States--data necessary to answer requests from members of Congress, State legislators, project planners, hospital administrators and other persons interested in the field of mental illness. These data are extremely useful, for example, in planning for facilities and services, research and training, and legislation and financing. In an effort to provide current data, the provisions survey statistics tabulated in these Mental Health Statistics--Current Facility Reports (Series MHB-H) are collected and published annually for certain patient movement and administrative categories, by state, for the state and county mental hospitals. Similar data are published for the Public Institutions for the Mentally Retarded (Series MHB-I) and Outpatient Psychiatric Clinics (Series MHB-J).

Certain trend data for the United States, covering the period 1963 through 1967 may be found in Table A. A graph depicts trends for some of the patient movement categories from 1950 through 1967. The data, by state for the current year, fiscal

1967, are found in Table 1. These data were obtained from the 1967 "Preliminary Survey of State and County Mental Hospitals". As these data are provisional, they are subject to some change. Data in greater detail--admissions with no prior psychiatric patient experience and resident patients by age, sex and mental disorder; personnel by occupation; maintenance expenditure by type--will appear in a future NIMH publication. Similar data for patients in the private mental hospitals, general hospitals with psychiatric services and outpatient psychiatric clinics will be available in other publications of the National Institute of Mental Health.

#### II. DESCRIPTION AND LIMITATIONS OF THE DATA

##### A. Patient Movement Data

The summary data presented in this report may be used to analyze the annual changes in year end populations of the state and county mental hospitals in terms of three categories of patient movement (admissions, net releases and deaths). These categories are defined as follows:

1. Admissions: This category includes three admission classifications. Admissions With No Prior Psychiatric

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Inpatient Experience includes patients admitted to hospitals with no record of prior admission to any inpatient psychiatric facility either within or outside the state system. The state system is defined to include state and county mental hospitals and public institutions for the mentally retarded. This category replaces the former classification, first admissions, which was defined as "a patient who has not previously been admitted to a public or nonpublic hospital authorized for the treatment of mental disorders." The major difference between these two definitions lies in the area of psychiatric services in general hospitals. In using the first admission definition, some states did not consider prior psychiatric treatment in a general hospital as constituting a previous psychiatric admission. Under the present definition such cases are considered as having a prior admission to an inpatient psychiatric facility. Therefore, the number of admissions with no prior inpatient psychiatric experience will either be less than or equal to the number of first admissions (old definition). Admissions With Prior Admission to Hospitals in Same State System are patients admitted to the hospital with a history of prior admission to a public mental hospital or a public institution for mentally retarded in the same state. All Other Admissions include patients admitted to the hospital with prior admission to other inpatient psychiatric facilities--state psychiatric facilities in other states, Veterans Administration hospitals, private mental hospitals, private institutions for the mentally retarded, and any other inpatient psychiatric facilities (including psychiatric services in general hospitals) which are medical facilities accepting patients for screening and/or treatment of psychiatric disorders.

2. Net Releases Alive from Hospital The concept of "net release alive from hospital" takes into account movement of patients into and out of the hospital since this quantity is the number of placements on extramural care plus direct discharges from the hospital less the number of returns from extramural care, all occurring during any one year. National data on placements and returns from extramural care are not available but net releases may be computed from less detailed movement data as:

$$\left[ \begin{array}{c} \text{Net} \\ \text{Releases} \\ \text{Alive from} \\ \text{Hospital} \end{array} \right] = \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{Beginning} \\ \text{of Year} \end{array} \right] + \left[ \begin{array}{c} \text{All Admis-} \\ \text{sions} \\ \text{excluding} \\ \text{Transfers} \end{array} \right] - \left[ \begin{array}{c} \text{Deaths} \\ \text{in} \\ \text{Hospital} \end{array} \right] - \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{End of} \\ \text{Year} \end{array} \right]$$

Interpretation of net releases alive from hospital should be made with caution. This quantity is the net number of releases alive from the state hospital system and includes not only direct discharges to the community and placement on leave but also direct discharges to other inpatient facilities outside the state system such as Veterans Administration hospitals, nursing homes, boarding care homes, and mental hospitals in other states. The number of net releases is used as a measure of movement out of the hospital rather than the total number of discharges because many discharges occur while patients are already outside the hospital on extramural care. The number of net releases may be considered an estimate of the number of effective releases from the hospital under the assumption that subtracting returns from leave during the year removes only the short term visits, leaves, and escapes and retains the effective releases; i.e., those from which the patients did not return to the hospital within the time period covered.

3. Deaths in Hospital This category includes only deaths occurring to patients resident in the hospital and does not include deaths among patients on leave even though these patients are still on the hospital books.

4. Patient Movement Ratios per 100,000 Civilian Population The admission ratio measures the proportion of people coming under care during the year while the average daily resident patient ratio measures the average proportion of the population under care at any one time during the year.

5. Patient Movement Ratios per 1,000 Average Resident Patients These ratios relate the average resident population to three movement categories: Total admissions, Net releases and Deaths, thus providing indexes of the amount and type of patient movement activity that occurred during the year. It should be kept in mind that the ratios shown in this publication are based on totals and as such they have the limitations of totals since they are not standardized for such important variables as age, sex, diagnosis, and years of hospitalization. To illustrate how these ratios are descriptive of changes in resident patient populations, consider the following hypothetical example: Suppose that the resident patient populations in State A and State B each decreased by 0.6 percent (or 6 per 1,000).

Considering only these data gives a limited and potentially misleading view of patient movement activity. However, now suppose that the patient movement ratios are computed to be the following:

Movement Category	State A	State B
Admissions	323.7	522.2
Net Releases	229.5	454.8
Deaths	99.9	73.5

These ratios show that State B has much higher rates of patient movement into and out of the hospital than State A. While these ratios highlight areas of difference between the two states, conclusions based only on these ratios may be fallacious. The differences can be isolated further by analyzing the data in terms of the patient characteristics mentioned above (age, sex, diagnosis, and years of hospitalization). Even at this point, one cannot evaluate the relative efficacy of the two state mental hospital programs since differences in patient movement ratios between states may also be attributable to a great many other factors, such as policies and laws controlling admissions and release, the ways in which the mental hospitals are utilized by the communities they serve, the types of patients admitted, the various treatment programs within the hospitals, and the availability of various community facilities that can serve as adjuncts or alternatives to hospitalization. Since the reasons for interstate differences in these movement ratios are complex and vary considerably from hospital to hospital within and between states, ratios constructed from gross movement data (i.e., state totals) can not be used to measure the therapeutic effectiveness of various hospital programs.

**6. Ratio of Net Releases to 1,000 Admissions** The ratio "net releases per 1,000 admissions" is a convenient index for summarizing the live net movement into and out of the hospital. For example, if the ratio is less than 100, there were more admissions than net releases. Note that this index does not relate net releases to admissions in the sense of a percent or rate because not all releases during a year derive from the admissions during that year. Some of these net releases occurred to patients with lengths of stay greater than one year, that is, patients admitted during some prior year.

## B. Expenditure Ratios

The expenditure per average daily resident patient has been the most commonly used ratio for comparing mental hospital expenditures. Its major limitation is that it does not adequately take into account the number of admissions for which a large share of the expenditure is required. If the patient base is enlarged to include admissions during the year the resulting sum is the best available estimate of patients under treatment during the year. This quantity is actually defined as:

$$\left[ \begin{array}{c} \text{Patients} \\ \text{Under} \\ \text{Treatment} \end{array} \right] = \left[ \begin{array}{c} \text{Resident} \\ \text{Patient} \\ \text{Beginning} \\ \text{of Year} \end{array} \right] + \left[ \begin{array}{c} \text{All Admis-} \\ \text{sions} \\ \text{excluding} \\ \text{Transfers} \end{array} \right] + \left[ \begin{array}{c} \text{Returns from Leave} \\ \text{among Patients on} \\ \text{Leave Beginning} \\ \text{of Year} \end{array} \right]$$

The estimate, however, does not include the last category, Returns from Leave, since these data are not available nationally.

The ratio of expenditures to patients under treatment appears to be a more realistic measure, but it does not solve the problem completely. While a larger share of the expenditures is required for the care of admissions, the index weights both admissions and resident patients equally.

The expenditure figures and ratios are not necessarily expenditures by state agencies alone inasmuch as county expenditures for the care of patients in the mental hospitals are included for Maryland, Michigan, New Jersey, Tennessee and Wisconsin, the only states with county mental hospitals. County data have been included to insure greater comparability among states in expenditures per patient.

## C. Interstate Variation

Considerable variation among states in patient movement, personnel, and expenditure data is indicated in Table 1.

Actual numbers are not comparable among states since they do not take into account differences in size of population. Therefore, ratios have been computed for several data categories.

For example, net releases and total admissions per 1,000 average resident patients show considerable variation, with net release rates ranging from 259 to 3,033. Rates of admission and resident patients end of year per 100,000 civilian population also vary considerably for State to State. In addition, a high of \$14.47 per patient under



treatment per day to a low of \$2.21 further points out the considerable variation existing among states.

However, as has been emphasized in Sections A4-A6, comparison of state ratios, while serving to highlight areas of differences, are limited. More detailed classifications of movement categories by such variables as age, sex, diagnosis and time on books are needed. Data on age, sex, and diagnosis as well as more detail on personnel and maintenance expenditures will be available in the near future. This detail will provide partial explanations of the gross differences noted in the above tables. Also, as mentioned previously, other factors such as policies and laws affecting admission and release of patients, other community treatment facilities, effectiveness of therapeutic programs, etc., must be evaluated to determine the extent of their influence on interstate variation.

### III. TRENDS

For the 12th consecutive year, the RESIDENT PATIENT POPULATION in the State and county mental hospitals has decreased from 559,000 in 1955 to 426,000 in 1967 or a drop of 24% during the 12 year period. The 6.0 percent decrease in resident patients during fiscal 1967 was the largest single year decline ever and was triple the decrease in resident patients that occurred between 1960 and 1961. This has occurred in spite of increases in the general population. Prior to 1956, the trend had been one of increasing numbers of residents, with the exception of only one year (1943) which saw a slight decrease.

Correspondingly, the number of NET RELEASES has continued to climb -- a trend which began in the mid 1940's. In 12 years (1955-1967), the number has almost tripled. In 1967, there were 335,737 net releases as compared with 126,498 in 1955.

Along with increasing numbers of net releases and decreasing numbers of resident patients, the number of TOTAL ADMISSIONS has increased steadily, continuing another trend which began in the mid 1940's. In 1967, the number of admissions was approximately 349,000. This has resulted in a 1967 admission rate of 179 patients per 100,000 civilian population, compared with 110 in 1955.

The number of DEATHS in the hospitals has fluctuated--over the years. In 1967,

40,000 deaths were reported. This is the lowest number of deaths reported in the last 12 years.

There are approximately 219,000 FULL TIME PERSONNEL caring for the mentally ill in our 304 State and county hospitals. The ratio of personnel per patients has been an ever increasing one and in 1967 it reached one full time employee for every 2 patients.

The MAINTENANCE EXPENDITURES for the care of these patients have also greatly increased--going over a billion dollars in 1962--and still climbing. Converting these data into ratios, in 1967, \$4.84 was spent each day per patient under treatment as compared with \$2.33 in 1955.

Trends in certain patient movement categories are depicted graphically for 1950-1967 on page 5. These trends, as well as others, are indicated numerically for the years 1963-1967 in Table A and include estimates for under-reporting wherever possible. Therefore, these totals, which are the most complete available, supersede totals published in prior reports. Also shown in Table A are the same data expressed as index numbers where 1963 is the base year. Thus, percent change since 1963 can be read directly from Table A with increases being numbers greater than 100 and decreases being numbers less than 100. For instance, the 1964 index number for admissions is 105.6. This means that admissions in that year were 5.6 percent greater than 1963 admissions. An index number is computed by dividing each of the observed numbers by the corresponding number in the base time period for each movement and administrative data category. The year 1963 was selected as the base year primarily because the number of resident patients, admissions, net releases, and death data were not atypical. Percentage change between the data for any two years other than 1963 may be computed by obtaining the difference between two index numbers concerned and dividing this difference by the index number for the earlier year. For example, the index numbers for net releases in 1964 and 1965 are 109.3 and 116.3. The percent change between 1964 and 1965 is given by:

$$\frac{116.3 - 109.3}{109.3} = \frac{7.0}{109.3} = 6.4$$

Therefore, there was a 6.4 percent increase in net release between 1964 and 1965.



NUMBER OF RESIDENT PATIENTS, TOTAL ADMISSIONS, NET RELEASES, AND DEATHS,  
STATE AND COUNTY MENTAL HOSPITALS, UNITED STATES, 1950-1967

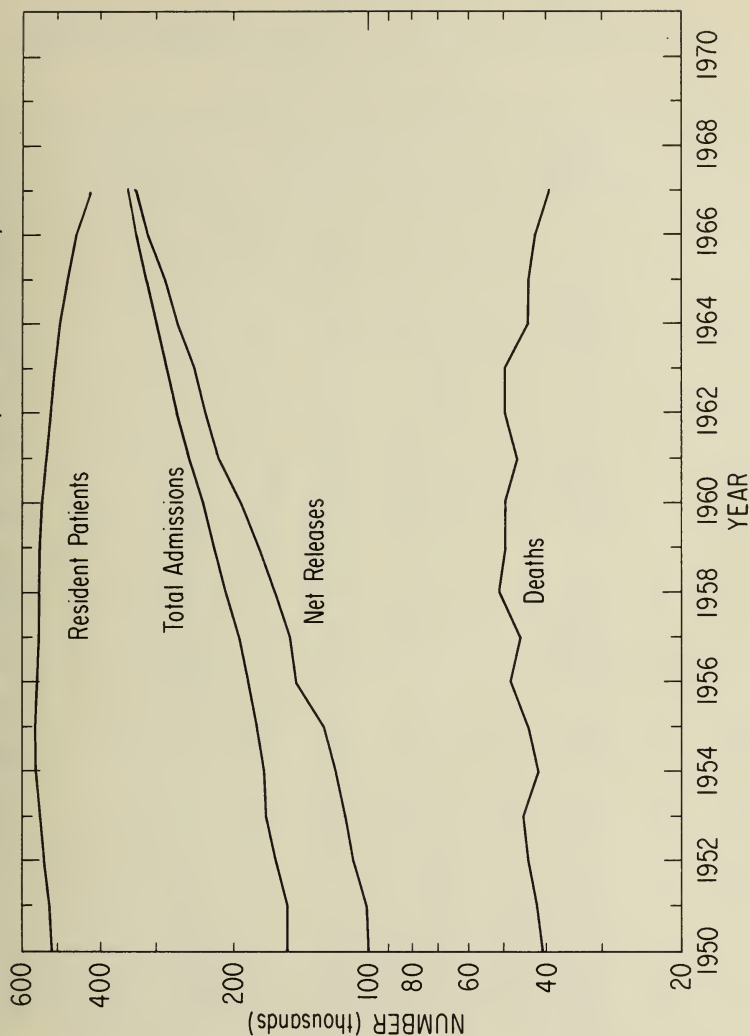


TABLE A

RECENT TRENDS OF PATIENT MOVEMENT AND ADMINISTRATIVE DATA, STATE AND COUNTY MENTAL HOSPITALS  
UNITED STATES, 1963 - 1967\*

Item	1963	1964	1965	1966	1967
All Admissions	263,591	299,561	314,027	327,014	349,561
Net Releases	245,745	268,616	285,760	308,636	335,737
Deaths in Hospital	49,052	44,624	43,964	42,755	59,608
Resident Patients End of Year	504,604	490,449	475,202	452,273	426,009
Personnel (full time) at End of Year	195,356	202,614	204,879	206,781	218,948
Maintenance Expenditures Per Resident Patient	\$1,081,537,167	\$1,144,024,206	\$1,204,345,256	\$1,300,380,295	\$1,415,480,302
Per Year	2,131.49	2,304.63	2,503.99	2,810.31	3,226.05
Per Patient under Treatment	5.84	6.50	6.86	7.70	8.84
Per Year	1,352.95	1,423.11	1,499.75	1,618.15	1,768.08
Per Day	3.71	3.89	4.11	4.43	4.84

## INDEX NUMBERS

All Admissions	100.0	105.6	110.7	115.3	122.9
Net Releases	100.0	109.3	116.3	125.6	136.6
Deaths in Hospital	100.0	91.4	89.6	87.2	80.7
Resident Patients End of Year	100.0	97.2	94.2	89.6	84.4
Personnel (full time) at End of Year	100.0	103.7	104.9	105.8	112.1
Maintenance Expenditures Per Resident Patient	100.0	105.8	111.4	120.2	150.9
Per Year	100.0	108.1	117.5	131.8	151.4
Per Patient under Treatment	100.0	107.9	117.5	131.8	151.4
Per Year	100.0	105.2	110.9	119.6	130.7
Per Day	100.0	104.9	110.8	119.4	130.5

\* These data include estimates for under-reporting wherever possible.

TABLE 1  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, JULY 1, 1966 - JUNE 30, 1967  
STATE AND COUNTY MENTAL HOSPITALS  
PATIENT MOVEMENT DATA

STATE	Number of Hospitals	Resident Patients Beginning of Year	Admissions (excluding transfers)				Net Releases Alive from Hospital	Deaths in Hospital	Resident Patients End of Year
			Total	No Prior Psychiatric Inpatient Experience	With Prior Admission to Hospital in Same System	All Other			
United States	304	452,793	348,561	1,156,986	2,140,809	1,37,778	335,737	39,608	426,009
Alabama 3/	2	7,715	4,296	2,156*	1,551	589*	3,677	414	7,720
Alaska 4/	2	303	300	123	154	23	395	5	305
Arizona	1	1,479	2,117	1,007*	686	424	2,378	124	1,094
Arkansas	2	2,298	3,051	1,395	1,111	545	3,241	168	1,940
California	12	26,658	29,906	12,705	12,979	4,222	32,978	1,478	22,108
Colorado	2	2,671	2,984	1,512	1,309	363	3,141	150	2,364
Connecticut	4	7,446	10,625	4,197	5,708	720	10,475	504	6,792
Delaware 5/ 6/	2	1,596	1,456	849	56	551	1,474	194	1,394
Dist. of Col.	1	5,924	2,518	582*	743*	1,193*	2,408	453	5,581
Florida	4	9,855	4,824	1,753	1,356	1,715	3,802	972	9,905
Georgia 7/	2	11,290	6,880	4,763	1,877	220	6,562	911	10,697
Hawaii	1	790	131	170	156	519	46	66	790
Idaho	2	719	752	395	265	92	716	61	694
Illinois	17	28,319	23,268*	7,301*	12,812*	3,155*	23,964*	2,839*	24,784*
Indiana	10	10,941	4,650	2,247	1,503	900	4,156	776	10,659
Iowa	6	1,719	5,340	2,216	2,410	714	5,244	132	1,685
Kansas	3	2,432	3,355	1,822	1,159	374	3,285	116	2,386
Kentucky	4	4,744	6,384	2,480	3,007	897	6,235	519	4,574
Louisiana 8/	3	5,947	8,663	3,962*	3,295*	1,406*	8,651	332	5,627
Maine 9/	3	2,758	1,998	1,096	694	208	1,596	332	2,828
Maryland 10/	7	8,437	11,289	5,297	5,992	0	10,637	854	8,235
Massachusetts 11/	14	16,199	13,081	6,792*	5,850*	441*	11,909	1,633	15,710
Michigan	10	17,182	10,003	—	—	—	10,114	959	16,102
Minnesota 12/	8	5,906	5,872	2,801	2,781	290	6,258	417	5,103
Mississippi	2	5,185	4,105	2,319	1,508	278	3,786	347	5,157
Missouri	8	9,927	7,617	3,901	2,555	1,161	7,717	799	9,028
Montana	1	1,413	2,140	813	—	1,327	2,033	110	1,410
Nebraska	4	3,086	1,882	940	701	241	1,971	268	2,729
Nevada	1	558	920	402	151	367	946	47	485
New Hampshire	1	2,250	1,690	888	330	472	1,514	200	2,226
New Jersey 13/	12	18,746	13,074	6,784	5,613	677	11,604	2,244	17,972
New Mexico	1	695	1,466	444	184	838	1,473	55	635
New York 14/	24	84,797	41,336	—	18,351	—	35,661	9,077	81,375
North Carolina	4	8,818	13,956	6,989	6,967	0	13,136	947	8,691
North Dakota	1	1,424	1,452	571	619	262	1,457	128	1,291
Ohio 15/	21	21,438	18,958	8,897	7,871*	2,190*	17,709	1,775	20,912
Oklahoma	4	4,729	5,695	2,747	2,105	1,045	6,316	302	4,006
Oregon	3	2,577	4,489	2,145	1,745	599	4,411	249	2,406
Pennsylvania 16/	20	35,071	9,617	5,587	1,675	2,355	8,846	2,635	33,207
Rhode Island 17/	1	1,986	2,243	974	1,269	0	2,253	33	1,943
South Carolina	2	6,119	3,636	1,566	1,261	809	3,178	469	6,108
South Dakota	1	1,548	1,540	744	596	0	1,257	181	1,450
Tennessee 18/	5	7,366	8,193	3,510*	3,750*	619*	7,909	622	7,028
Texas 19/	8	15,714	14,617	6,919	6,298	1,400	13,966	1,510	15,035
Utah	1	532	998	420	359	219	962	53	515
Vermont	1	1,175	726	373	353	0	712	120	1,059
Virginia	5	11,535	7,290	3,481	2,370	1,439	6,456	1,039	11,320
Washington	3	3,498	3,791	1,454*	1,518*	819*	3,806	297	3,196
West Virginia	5	5,350	3,693	1,827	1,478	388	3,686	432	4,873
Wisconsin 20/	42	13,339	8,662	4,526	3,608	728	8,325	1,067	12,809
Wyoming	1	589	524	363	106	55	590	25	498

NOTE: Refer to page 10 for footnotes

TABLE 1 (Continued)  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, JULY 1, 1966 - JUNE 30, 1967  
STATE AND COUNTY MENTAL HOSPITALS  
PERSONNEL AND FINANCIAL DATA

STATE	Average Daily Resident Patient Population	Patients under Treatment	Total Full-Time Personnel End of Year	Maintenance Expenditures		
				Total Amount	Per Resident Patient <sup>21/</sup>	Per Patient under Treatment <sup>22/</sup>
United States	438,587	801,354	218,948	\$1,415,480,502	\$6.84	\$4.84
Alabama <sup>3/</sup>	7,726	12,011	2,122	12,134,778	4.30	2.77
Alaska <sup>4/</sup>	179	603	224	3,185,192	32.37	14.47
Arizona	1,202	3,596	894	4,997,316	11.39	3.81
Arkansas	2,088	5,349	1,596	8,358,073	10.97	4.28
California	23,284	56,564	12,479	127,689,086	15.02	6.18
Colorado	2,528	5,655	2,658	19,465,675	21.10	9.43
Connecticut	7,117	18,071	4,073	29,185,969	11.24	4.42
Delaware <sup>5/</sup>	1,456	3,052	960	5,339,664	10.05	4.79
District of Columbia <sup>6/</sup>	5,765	8,442	4,014*	32,499,394	15.44	10.55
Florida	9,931	14,679	4,736	22,612,319	6.29	4.26
Georgia <sup>7/</sup>	10,996	18,170	3,578	25,915,562	6.46	3.91
Hawaii	720	1,227	398	3,419,256	13.01	7.64
Idaho	713	1,471	494	3,178,370	12.21	5.92
Illinois	26,682	51,587*	14,630*	108,269,424	11.12	5.75*
Indiana	10,753	15,591	5,614	33,064,994	8.42	5.81
Iowa	1,685	7,059	1,964	12,497,068	20.32	4.85
Kansas	2,411	5,787	2,279	13,618,865	15.48	6.45
Kentucky <sup>8/</sup>	4,563	11,128	2,329	14,490,320*	8.70*	3.57*
Louisiana <sup>9/</sup>	5,665	14,610	2,711	17,323,902	8.38	3.25
Maine <sup>3/</sup>	2,785	4,756	1,102	7,194,550	7.08	4.14
Maryland <sup>10/</sup>	8,426	19,726	4,404	27,817,464	9.04	3.86
Massachusetts <sup>11/</sup>	15,936	29,282	9,179	59,918,462	10.25	5.61
Michigan	16,769	27,185	7,511	59,635,976	9.73	6.01
Minnesota <sup>12/</sup>	5,585	11,778	3,037*	20,151,615*	9.89*	4.69*
Mississippi	5,138	9,290	1,859	7,482,481	3.99	2.21
Missouri	9,538	17,544	5,928	34,690,699*	9.96*	5.42*
Montana	1,428	3,553	578	3,836,179	7.36	2.96
Nebraska	2,933	4,968	2,443	12,311,229	11.50	6.79
Nevada	534	1,478	255	2,010,973	10.32	3.73
New Hampshire	2,174	3,940	1,056	6,261,674	7.89	4.39
New Jersey <sup>13/</sup>	18,446	31,820	9,359	60,225,606	8.95	5.19
New Mexico	644	2,161	502	2,838,377	12.08	3.60
New York <sup>14/</sup>	82,876	126,133	43,297	232,758,081	7.69	5.06
North Carolina	8,803	22,774	4,026	24,201,115	7.53	2.91
North Dakota	1,373	2,876	642	4,132,319	8.25	3.94
Ohio <sup>15/</sup>	21,281	40,396	8,763	52,960,513	6.83	3.59
Oklahoma	4,285	10,624	2,733	12,815,365	8.19	3.30
Oregon	2,485	7,066	1,301	9,546,675	10.53	3.70
Pennsylvania <sup>16/</sup>	34,370	44,688	15,186	102,623,548	8.19	6.30
Rhode Island <sup>17/</sup>	1,941	4,229	935	7,262,241	10.25	4.70
South Carolina	6,137	9,755	2,118	12,315,210	5.50	3.46
South Dakota	1,498	2,888	866	4,011,866	7.34	3.81
Tennessee <sup>18/</sup>	7,147	15,559	3,170	16,869,312	6.47	2.97
Texas <sup>19/</sup>	15,193	30,331	5,766	30,625,590	5.52	2.77
Utah	533	1,550	465	2,973,223*	15.28	5.32
Vermont	1,163	1,901	565	3,652,189	8.60	5.26
Virginia	11,581	18,825	4,326	22,654,691	5.44	3.42
Washington	3,308	7,289	2,285	17,864,849	14.80	6.71
West Virginia	5,240	9,043	1,987	9,091,781	4.75	2.75
Wisconsin <sup>20/</sup>	13,005	22,201	5,246*	45,343,634*	9.55*	5.60*
Wyoming	550	1,113	285	1,957,390	9.75	4.82

NOTE: Refer to page 10 for footnotes



TABLE 1 (Continued)  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, JULY 1, 1966 - JUNE 30, 1967  
STATE AND COUNTY MENTAL HOSPITALS  
PATIENT MOVEMENT RATIOS

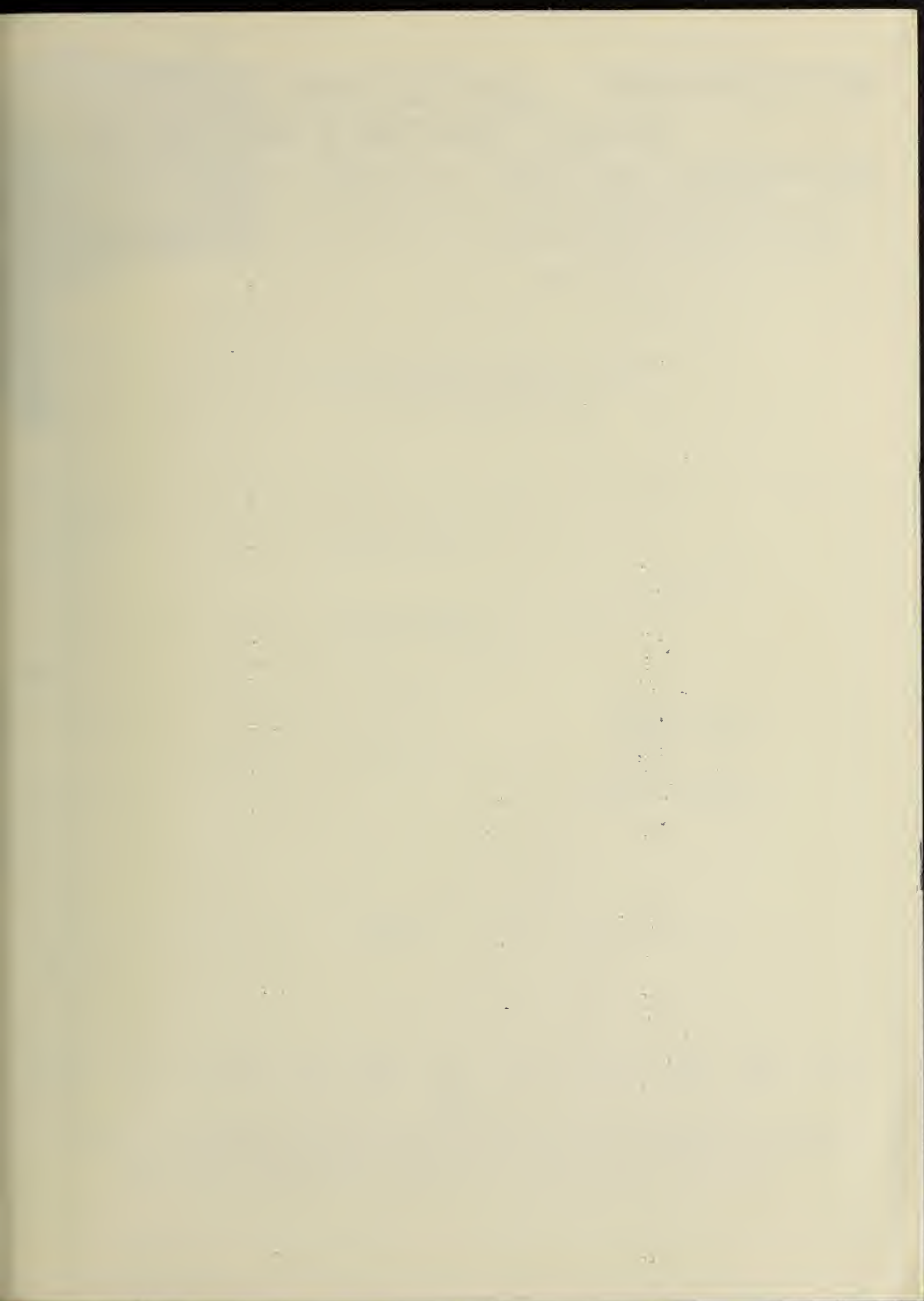
STATE	Rate per 100,000 Civilian Population, <sup>25/</sup>		Per 1,000 Average Resident Patients <sup>26/</sup>			Net Releases per 1,000 Total Admissions
	Total Admissions	Resident Patients at End of Year	Total Admissions	Net Releases in Hospital	Deaths in Hospital	
United States	179.0	217.6	793.7	764.8	90.2	963.6
Alabama <sup>3/</sup>	123.0	220.3	556.6	502.3	53.6	902.5
Alaska	127.1	85.3	1,185.8	1,561.3	19.8	1,316.7
Arizona	132.8	68.1	1,644.9	1,847.7	96.3	1,123.3
Arkansas	156.3	99.1	1,439.8	1,529.5	79.3	1,062.3
California	160.7	117.6	1,226.5	1,352.5	60.6	1,102.7
Colorado	155.3	122.7	1,185.1	1,247.4	59.6	1,052.6
Connecticut	367.8	233.2	1,492.5	1,471.4	112.9	985.9
Delaware <sup>3/</sup>	234.9	266.7	977.2	969.3	130.2	1,012.4
District of Columbia	248.0	587.9	437.7	418.6	78.7	956.3
Florida	82.4	167.8	488.3	384.8	98.4	788.1
Georgia <sup>2/</sup>	157.8	243.7	625.8	596.9	82.9	953.8
Hawaii	64.4	96.8	601.9	714.9	65.4	1,187.6
Idaho	108.4	99.9	1,063.6	1,012.7	86.3	952.1
Illinois	216.0*	229.0*	876.3*	902.5*	106.9*	1,029.9*
Indiana	93.7	213.7	430.6	384.8	71.9	893.8
Iowa	193.8	61.2	3,139.3	3,082.9	77.6	982.0
Kansas	149.2	105.8	1,392.7	1,363.6	46.2	979.1
Kentucky	203.4	139.2	1,400.3	1,367.5	113.8	975.7
Louisiana <sup>3/</sup>	240.8	155.4	1,497.0	1,494.9	57.4	998.6
Maine <sup>3/</sup>	208.1	295.2	715.4	571.4	118.9	798.8
Maryland <sup>10/</sup>	316.0	228.4	1,354.2	1,276.0	102.4	942.2
Massachusetts <sup>11/</sup>	243.4	291.6	820.0	746.4	104.2	910.3
Michigan	117.6	188.0	601.1	607.7	58.2	1,011.1
Minnesota <sup>12/</sup>	164.4	142.7	1,066.7	1,136.8	75.7	1,065.7
Mississippi	177.4	222.3	793.9	732.2	67.1	922.3
Missouri	167.6	197.8	803.7	814.2	84.3	1,013.1
Montana	309.2	204.1	1,515.6	1,439.8	77.9	950.0
Nebraska	132.1	181.8	847.2	877.8	92.2	1,047.3
Nevada	213.5	111.0	1,782.5	1,812.3	90.0	1,028.3
New Hampshire	289.6	326.9	786.4	704.5	93.1	895.9
New Jersey <sup>13/</sup>	189.6	258.7	712.1	632.1	122.2	887.6
New Mexico	149.0	64.5	2,204.5	2,215.0	79.7	1,004.8
New York <sup>14/</sup>	226.7	444.6	497.5	429.4	109.2	863.2
North Carolina	285.3	176.9	1,594.1	1,500.4	108.2	941.2
North Dakota	293.9	205.9	1,069.2	1,072.9	94.3	1,005.4
Ohio <sup>15/</sup>	182.4	200.4	895.3	836.3	83.8	934.1
Oklahoma	241.3	163.7	1,349.6	1,446.0	89.1	1,071.4
Oregon	226.6	120.7	1,801.4	1,770.1	99.9	982.6
Pennsylvania <sup>16/</sup>	82.9	286.0	281.7	259.1	77.2	915.6
Rhode Island <sup>17/</sup>	256.6	222.1	1,141.5	1,146.6	16.8	1,004.5
South Carolina	144.4	241.8	594.7	519.8	76.7	874.0
South Dakota	200.0	217.4	893.9	838.6	120.7	938.1
Tennessee <sup>18/</sup>	215.0	182.2	1,136.4	1,098.9	86.4	956.5
Texas <sup>19/</sup>	137.9	141.1	950.7	909.7	95.2	956.8
Utah	98.6	50.5	1,904.6	1,835.9	101.1	963.9
Vermont	175.4	257.0	647.1	634.6	107.0	990.7
Virginia	188.4	260.5	637.6	564.7	90.9	885.6
Washington	126.1	105.2	1,134.4	1,158.8	88.9	1,004.0
West Virginia	204.8	271.2	722.4	721.4	94.3	965.5
Wisconsin <sup>20/</sup>	272.3	306.1	677.6	636.8	81.6	939.4
Wyoming	167.4	160.1	963.2	1,084.6	46.0	1,126.0

NOTE: Refer to page 10 for footnotes

- 1/ Excludes New York and Michigan.
- 2/ Excludes Michigan.
- 3/ Alabama: Data cover fiscal year ending September 30, 1967.
- 4/ Alaska: Contract for the partial use of Morningside Hospital, Portland, Oregon, terminated June 30, 1967 and all Alaskan patients were withdrawn by June 27. Data for Morningside Hospital are included in resident patients beginning of year (116), deaths (1), and maintenance expenditures (an estimated \$1,070,000).
- 5/ Delaware: As a result of a fire at Delaware State Hospital August 16, 1966, 268 patients were transferred out. All but 89 were returned within six weeks. Thirty were assigned to Governor Bacon Health Center at Delaware City and 59 to the Hospital for the Mentally Retarded at Stockley.
- 6/ District of Columbia: Since a substantial proportion of the patients at Saint Elizabeths Hospital are non-residents of the District of Columbia, total admissions and resident patient rates per 100,000 population are computed only for residents of the District of Columbia. District residents include 1,964 total admissions and 4,662 resident patients end of year.
- 7/ Georgia: Southwestern State Hospital opened during fiscal year 1967; the following data were not included in the table: deaths (1), resident patients at end of year (406), personnel (311), maintenance (\$,950,000) and average daily (254).
- 8/ Louisiana: Data for admission categories are unavailable. Estimates based on 1966 reported data.
- 9/ Maine: Pineland Hospital and Training Center is a dual purpose institution. Only data pertaining to the mentally ill patients are reported here.
- 10/ Maryland: Data collected for only the classifications "First Admission" and "Readmission".
- 11/ Massachusetts: Lowell Mental Health Center averaged daily census is unavailable. Therefore, in computing daily expenditures per resident patient, \$276,126 should be excluded from the total amount.
- 12/ Minnesota: Data for resident patients at the end of the year include six mentally ill patients receiving tuberculosis treatment at Glen Lake Sanitarium.
- 13/ New Jersey: Personnel and maintenance expenditures were reported for the calendar year 1966.
- 14/ New York: Data cover fiscal year ending March 31, 1967. Personnel data include Beacon Institute for Defective Delinquents for the mentally retarded which is connected with the Matteawan State Hospital. Maintenance expenditures include Bronx Mental Retardation Division of the Bronx State Hospital. Therefore, these data are an overestimate.
- 15/ Ohio: Includes data for mentally ill patients at the following dual purpose institutions: Apple Creek State Hospital, Cambridge State Hospital and Springview Hospital. Does not include personnel and maintenance expenditure data for Apple Creek State Hospital and, therefore, the maintenance expenditure ratios for Ohio exclude this facility. (26 patients under treatment and 27 average daily patients were reported.) At Cambridge and Springview, although patient data pertain only to the mentally ill, personnel and maintenance data pertain to all patients. Chillicothe Psychiatric Criminology Institute accepted first transfer patients May 9, 1967; the following data were not included in the tables: resident patients at end of year (15), personnel (51) and maintenance \$38,553.
- 16/ Pennsylvania: Western State School and Hospital is a dual purpose institution. Only data pertaining to the mentally ill patients are reported here. Data on personnel and maintenance expenditures are unavailable and, therefore, the maintenance expenditure ratios for Pennsylvania exclude Western State School and Hospital. (Western State School and Hospital reported 36 patients under treatment and 42 average daily patients.)
- 17/ Rhode Island: A major reorganization of services within the Rhode Island Medical Center produced unusually large changes in the data for some of the movement categories compared with those for previous years.
- 18/ Tennessee: The count of admissions includes 716 admissions who became inpatients during the year, having been outpatients or in partial hospitalization programs previously in the same hospital.
- 19/ Texas: Data cover fiscal year ending August 31, 1967.
- 20/ Wisconsin: Wisconsin Diagnostic Center operations were discontinued. Resident patients and personnel employed at end of the year were not reported.
- 21/ Per resident patient maintenance expenditures are based on the average daily resident patient population of hospitals reporting expenditures.
- 22/ Per patient under treatment maintenance expenditures are based on the patients under treatment (resident patients beginning of year plus total admissions) for hospitals reporting expenditures.
- 23/ Admission and resident patient rates are per 100,000 estimated civilian population. Source: U. S. Bureau of the Census, Current Population Reports, Series P-25, No. 380, provisional estimate for 1967.
- 24/ Average resident patient rates are based on the average of the beginning and end of year resident patient population.

Symbols Used: \* Indicates data which are estimates or include estimates.

--- Data not available.



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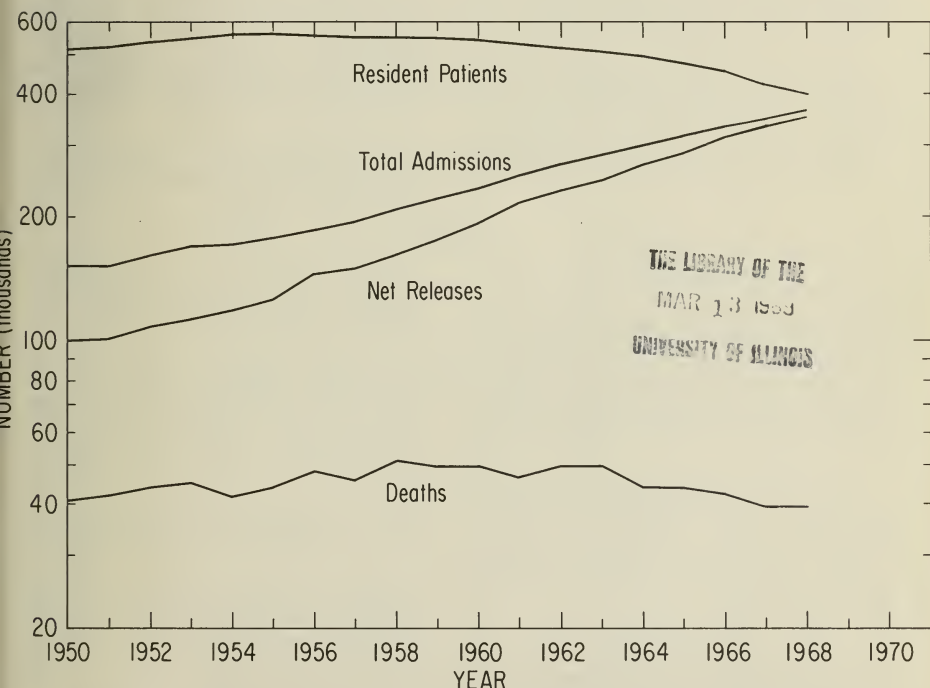
# MENTAL HEALTH STATISTICS

## CURRENT FACILITY REPORTS

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service, National Institute of Mental Health

PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA  
STATE AND COUNTY MENTAL HOSPITALS  
UNITED STATES

July 1, 1967 - June 30, 1968



NUMBER OF RESIDENT PATIENTS, TOTAL ADMISSIONS, NET RELEASES, AND DEATHS,  
STATE AND COUNTY MENTAL HOSPITALS, UNITED STATES, 1950-1968

## I. INTRODUCTION

Since the passage of the National Mental Health Act by Congress in 1946, the National Institute of Mental Health has been responsible for collecting and publishing data on the hospitalized mentally ill in the United States -- data necessary to answer requests from members of Congress, State legislators, project planners, hospital administrators and other persons interested in the field of mental illness. These data are extremely useful, for example, in planning for facilities and services, research and training, and legislation and financing. In an effort to provide current data, the provisional survey statistics tabulated in these Mental Health Statistics-Current Facility Reports (Series MHB-H) are collected and published annually for certain patient movement and administrative categories, by State, for the State and county mental hospitals. Similar data are published for the Public Institutions for the Mentally Retarded (Series MHB-I) and Out-patient Psychiatric Clinics (Series MHB-J).

As these data are provisional, they are subject to some change. Data in greater detail -- admissions with no prior psychiatric in-patient experience and resident patients by age, sex and mental disorder; personnel by occupation; maintenance expenditure by type -- will appear in other NIMH publications.

Similar data for patients in private mental hospitals, general hospitals with psychiatric services and outpatient psychiatric clinics are available in other publications of the National Institute of Mental Health.

Trends in certain patient movement categories for public mental hospitals are depicted graphically for the years 1950 - 1968 on the cover. These trends, as well as others, are indicated numerically for the years 1963-1968 in Table 1 and include estimates for under-reporting wherever possible. These totals, which are the most complete available, supersede totals published in prior reports. Also shown in Table 1 are the same data expressed as index numbers with 1963 used as the base year. Thus, percent change since 1963 can be read directly from Table 1, with increases being numbers greater than 100 and decreases being numbers less than 100. For instance, the 1964 index number for admissions is 105.6, this means that admissions in that year were 5.6 percent greater than 1963 admissions. An index number shows the percent change between a specific year and the base period. It does not indicate percent change between years other than the base year.

Table 2 shows detailed patient movement and administrative data for each State. Definitions of terms used in this report are given in Section III.

## II. HIGHLIGHTS

For the 13th consecutive year, the resident patient population in the State and county mental hospitals has decreased. As of June 30, 1968, the number of resident patients was 400,681, a decrease of about six percent over the figure for the previous year. This is about the same percentage decrease that was experienced between the years 1966 and 1967. Prior to 1956, the trend had been one of increasing numbers of resident patients.

The number of net releases has continued to climb -- a trend which began in the mid 1940's. In 13 years (1955-1968), the number has almost tripled. In 1968, there were 351,461 net releases as compared with 126,498 in 1955. Since 1963, the number of net releases per 1,000 average resident patients has almost doubled.

Along with increasing numbers of net releases and decreasing numbers of resident patients, the number of total admissions has increased steadily, continuing another trend which began in the mid 1940's. In 1968, the

the number of admissions was approximately 365,455. This has resulted in a 1968 admission rate of 186 patients per 100,000 civilian population, compared with 110 in 1955.

The number of deaths in the hospitals has been decreasing slowly over the last several years, while the rate per 1,000 resident patients has remained around 91. However, for 1968 the number of deaths per 1,000 resident patients increased to 95.9, almost equal to the 1963 rate.

The ratio of personnel per patients continued to increase. In 1968 there was one full-time employee for every 1.9 patients.

The maintenance expenditures for the care of these patients have also greatly increased reaching over one and a half billion dollars in 1968. Converting these data into ratios, in 1968, \$5.45 was spent each day per patient under treatment as compared with \$2.33 in 1955.

TABLE 1

RECENT TRENDS OF PATIENT MOVEMENT AND ADMINISTRATIVE DATA, STATE AND COUNTY MENTAL HOSPITALS  
UNITED STATES, 1963 - 1968\*

Item	1963	1964	1965	1966	1967	1968
All Admissions	283,591	299,561	314,027	327,014	348,561	365,455
Net Releases	245,745	268,616	285,760	308,656	335,737	351,461
Deaths in Hospital	49,082	44,824	43,964	42,753	39,608	39,677
Resident Patients End of Year	504,604	490,449	475,202	452,273	426,009	400,581
Personnel (full time) at End of Year	195,356	202,614	204,879	206,781	213,948	217,128
Maintenance Expenditures Per Resident Patient	\$1,081,537,167	\$1,144,024,206	\$1,204,345,256	\$1,300,380,295	\$1,415,480,302	\$1,577,631,758
Per Day	2,131.49	2,304.63	2,503.99	2,610.31	3,226.05	3,831.49
Per Patient under Treatment	5.84	6.30	6.86	7.70	8.84	10.47
Per Year	1,352.93	1,423.11	1,499.75	1,618.15	1,768.08	1,996.11
Per Day	3.71	3.89	4.11	4.43	4.84	5.45

## INDEX NUMBERS

All Admissions	100.0	105.6	110.7	115.3	122.9	128.9
Net Releases	100.0	109.3	116.3	125.6	136.6	143.0
Deaths in Hospital	100.0	91.4	89.6	87.2	80.7	80.9
Resident Patients End of Year	100.0	97.2	94.2	89.6	84.4	79.4
Personnel (full time) at End of Year	100.0	103.7	104.9	105.8	112.1	111.1
Maintenance Expenditures Per Resident Patient	100.0	105.8	111.4	120.2	130.9	145.9
Per Day	100.0	108.1	117.5	131.8	151.4	179.8
Per Patient under Treatment	100.0	107.9	117.5	131.8	151.4	179.3
Per Year	100.0	105.2	110.9	119.6	130.7	147.5
Per Day	100.0	104.9	110.8	119.4	130.5	146.9

\*These data include estimates for underreporting wherever possible.

TABLE 2  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, JULY 1, 1967 - JUNE 30, 1968

STATE AND COUNTY MENTAL HOSPITALS

PATIENT MOVEMENT DATA

STATE	Number of Hospitals	Resident Patients Beginning of Year	Admissions (excluding transfers)				Net Releases Alive from Hospital	Deaths in Hospital	Resident Patients End of Year
			Total	No Prior Psychiatric Inpatient Experience	With Prior Admission to Hospital in Same System	All Other			
United States	312	426,364	365,455	1/144,566	2/125,909	1/46,876	351,461	39,677	400,681
Alabama <sup>3/</sup>	2	7,720	3,984	1,881	1,177	926	3,410	595	7,699
Alaska	1	203	313	173	120	20	349	3	164
Arizona	1	1,101	1,100	880*	220*	0	977	96	1,128
Arkansas	2	1,940	2,691	1,203	1,191	297	2,798	166	1,667
California <sup>4/</sup>	12	22,108	32,471	13,206	15,583	3,682	34,493	1,148	18,958
Colorado	2	1,844	3,169	1,535	657	977	3,237	135	1,641
Connecticut <sup>5/</sup>	4	6,662	12,179	4,712	6,651*	856*	12,032	709	6,100
Delaware	2	1,384	1,358	842	467	49	1,179	167	1,396
Dist. of Columbia <sup>6/</sup>	1	5,658	3,910	1,233*	1,162*	1,515*	3,638	453	5,477
Florida	4	9,905	5,037	2,262	1,660	1,115	4,271	1,068	9,603
Georgia <sup>7/</sup>	3	11,128	7,609	5,715	1,894	0	7,016	912	10,809
Hawaii	1	662	537	151*	230	156*	568*	36	595*
Idaho	2	691	869	---	---	---	844	51	633
Illinois <sup>8/</sup>	20	24,799	24,622	7,761	13,980	2,881	25,264	2,596	21,561
Indiana	10	10,659	4,623	2,234*	1,494*	895*	4,566	776	9,940
Iowa	6	1,720	5,469	2,342	2,466	661	5,617	123	1,449
Kansas	3	2,386	3,326	1,869	1,041	416	3,480	121	2,101
Kentucky	4	4,374	6,154	2,514	2,955	685	6,074	553	3,901
Louisiana	3	5,627	7,012	3,545*	3,467*	0	7,186	318	5,135
Maine <sup>9/</sup>	3	2,628	2,016	1,082	701	233	1,704	344	2,796
Maryland <sup>10/</sup>	7	8,235	12,204	5,209	6,995	0	11,323	929	7,941
Massachusetts	14	15,710	13,941	8,815	5,126	0	12,859	1,697	15,095
Michigan	10	16,503	10,011	4,870	0	5,141	10,332	888	15,294
Minnesota <sup>11/</sup>	8	5,103	5,953*	---	2,869*	---	6,414	378	4,244
Mississippi	2	5,167	4,204	2,375	1,336	493	3,980	358	5,123
Missouri	8	9,008	9,648	5,548*	3,349*	751*	10,387	781	7,488
Montana	1	1,410	1,603	855	0	748	1,496	141	1,376
Nebraska	4	2,729	1,979	1,015	720	244	2,446	203	2,059
Nevada	1	485	928	449	358	121	937	25	451
New Hampshire	1	2,226	1,795	1,008	117	670	1,657	206	2,158
New Jersey	12	17,972	13,587	6,372	6,274	941	12,566	2,231	16,762
New Mexico	1	635	1,511	509	426	576	1,439	61	646
New York <sup>12/</sup>	25	81,375	44,171	---	---	---	36,854	9,684	79,008
North Carolina	4	8,091	14,111	6,705	7,406	0	13,510	1,033	8,259
North Dakota	1	1,291	1,377	562	573	242	1,380	80	1,208
Ohio <sup>13/</sup>	22	20,931	20,477	9,401	8,941*	2,135*	18,688	1,854	20,866
Oklahoma	4	3,965	5,801	2,648	2,186	919	5,702	352	3,852
Oregon	3	2,406	4,641	2,206	1,803	632	4,605	223	2,219
Pennsylvania <sup>14/</sup>	20	33,207	9,012	4,116	2,349	2,547	8,944	2,482	30,793
Rhode Island <sup>15/</sup>	2	1,998	3,965	856	1,255	1,854	4,000	16	1,947
South Carolina	3	6,108	4,007	1,297	1,531	1,179	3,589	630	5,896
South Dakota	1	1,450	1,408	778	626	4	1,362	134	1,342
Tennessee <sup>16/</sup>	5	7,028	9,646	4,385*	4,230*	1,031*	9,043	648	6,965
Texas <sup>17/</sup>	8	15,035	14,920	6,863	806	7,251	14,440	1,260	14,235
Utah	1	515	1,070	417	395	258	1,008	35	542
Vermont	1	1,117	816	427	342	47	693	161	1,079
Virginia <sup>18/</sup>	7	11,330	7,602	3,630	2,143	1,829	6,604	1,235	11,371
Washington	3	3,186	3,774	1,633*	1,439*	702*	3,819	211	2,930
West Virginia	5	4,832	3,390	1,598	1,553	239	3,200	428	4,594
Wisconsin	41	12,809	8,933	4,496	3,767	670	9,046	998	11,698
Wyoming	1	498	541	385	98	58	505	25	509

Note: Refer to page 7 for footnotes



TABLE 2 (Continued)

PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, JULY 1, 1967 - JUNE 30, 1968

## STATE AND COUNTY MENTAL HOSPITALS

## PERSONNEL AND FINANCIAL DATA

STATE	Average Daily Resident Patient Population	Patients under Treatment	Total Full-Time Personnel End of Year	Maintenance Expenditures		
				Total Amount	Daily Expenditures Per Resident Patient 19/	Per Patient under Treatment 20/
United States	412,818	791,822	217,128	\$1,577,651,758	\$10.47	\$5.45
Alabama <sup>3/</sup>	7,685	11,704	2,234	15,955,007	5.67	3.72
Alaska	172	516	221	2,270,200*	36.06*	12.02*
Arizona	1,089	2,201	742	5,899,355	14.80	7.32
Arkansas	1,805	4,631	1,554	9,204,111	15.93	5.43
California <sup>4/</sup>	19,608	54,579	12,334	116,064,544*	16.17*	5.81*
Colorado	1,757	5,013	2,353	18,501,488*	28.77*	10.08*
Connecticut <sup>5/</sup>	6,507	18,841	4,066	33,498,570*	14.06*	4.86*
Delaware	1,365	2,742	923*	5,612,941*	11.24*	5.59*
Dist. of Columbia <sup>6/</sup>	5,428	9,588	3,975	32,092,895	16.12	9.16
Florida	9,960	14,942	4,796	26,522,398	7.28	4.85
Georgia <sup>7/</sup>	10,961	18,737	4,518	34,657,451	8.64	5.05
Hawaii	268	1,109	421	5,674,094	15.49	8.37
Idaho	648	1,560	477	3,035,823	12.80	5.32
Illinois <sup>8/</sup>	23,394	49,421	15,752	136,845,790	15.98	7.57
Indiana	10,414	15,282	5,577	40,046,355	10.51	7.16
Iowa	1,548	7,189	1,906	14,169,121	25.01	5.39
Kansas	2,258	5,712	2,244	14,610,282	17.68	6.99
Kentucky	4,143	10,528	2,245	14,608,661	9.63	3.79
Louisiana	5,391	12,639	2,894	19,060,639	9.66	4.12
Maine <sup>9/</sup>	2,813	4,847	1,145	7,916,094*	7.69*	4.46*
Maryland <sup>10/</sup>	7,795	20,439	4,195	32,248,574	11.50	4.51
Massachusetts	15,354	29,651	8,452	66,187,145	11.79	6.10
Michigan	15,188	26,514	7,700*	65,446,014*	11.41*	6.54*
Minnesota <sup>11/</sup>	4,740	11,036*	2,937	24,693,757	14.23	6.11*
Mississippi	5,163	9,361	1,972	9,086,598	4.81	2.65
Missouri	8,229	18,656	6,244	41,432,502	13.76	6.07
Montana	1,381	3,013	617	4,493,415	8.89	4.07
Nebraska	2,549	4,709	2,465	14,108,995	16.40	8.18
Nevada	456	1,413	296	2,419,643	14.50	4.68
New Hampshire	2,138	4,021	984	7,281,105	9.50	4.95
New Jersey	17,320	31,559	9,590	64,051,258	10.10	5.55
New Mexico	606	2,146	507	3,064,169	13.82	3.90
New York <sup>12/</sup>	80,575*	125,546	37,643	254,010,328	8.72*	5.59
North Carolina	8,466	22,802	4,254	27,435,933	8.85	3.29
North Dakota	1,274	2,668	644	4,547,908	9.75	4.66
Ohio <sup>13/</sup>	20,796	41,408	8,938	65,544,709	8.62	4.33
Oklahoma	3,936	9,786	2,865	14,296,423	9.92	3.99
Oregon	2,293	7,047	1,276	10,241,713	12.20	3.97
Pennsylvania <sup>14/</sup>	32,355	42,219	15,454	117,027,587	9.90	7.58
Rhode Island <sup>15/</sup>	2,017	5,963	1,066	9,115,653	12.35*	4.18*
South Carolina	5,994	10,115	2,145	13,560,929	6.09	3.61
South Dakota	1,400	2,858	826	4,732,575	9.24	4.62
Tennessee <sup>16/</sup>	7,033	16,674	3,813	20,072,985	7.80	3.29
Texas <sup>17/</sup>	14,651	29,955	6,050	36,328,359	6.77	3.51
Utah	557	1,585	448	2,801,764	14.26	4.85
Vermont	1,112	1,953	589	3,711,317	9.12	5.25
Virginia <sup>18/</sup>	11,394	18,932	4,676	25,974,045	6.09	3.67
Washington	3,086	6,960	2,280	19,892,305	17.61	7.81
West Virginia	4,696	8,222	2,040	10,854,657	6.50	3.60
Wisconsin	12,403	21,742	5,521*	48,992,000*	10.79*	6.16*
Wyoming	519	1,039	306	1,959,596	10.32	5.15

Refer to page 7 for footnotes

TABLE 2 (Continued)  
PROVISIONAL PATIENT MOVEMENT AND ADMINISTRATIVE DATA: UNITED STATES, JULY 1, 1967 - JUNE 30, 1968

STATE AND COUNTY MENTAL HOSPITALS

PATIENT MOVEMENT RATIOS

STATE	Rate per 100,000 Civilian Population <u>21/</u>		Rate per 1,000 Average Resident Patients <u>22/</u>			Net Releases per 1,000 Total Admissions
	Total Admissions	Resident Patients at End of Year	Total Admissions	Net Releases Alive from Hospital	Deaths in Hospital	
United States	185.9	202.8	883.8	849.9	95.9	961.7
Alabama <u>3/</u>	113.2	218.1	516.7	442.3	77.2	855.9
Alaska	130.4	67.5	1,701.1	1,696.7	16.3	1,115.0
Arizona	67.6	68.9	986.5	876.2	86.1	888.2
Arkansas	135.0	65.3	1,491.7	1,551.0	92.0	1,059.8
California <u>4/</u>	173.8	100.5	1,562.2	1,690.7	55.9	1,062.3
Colorado	159.9	82.4	1,818.1	1,857.1	77.5	1,021.5
Connecticut <u>5/</u>	416.4	207.0	1,908.6	1,885.6	111.1	987.9
Delaware	261.2	266.4	977.0	848.2	120.1	868.2
Dist. of Columbia <u>6/</u>	381.5	590.8	702.2	653.4	81.4	930.4
Florida	83.9	158.5	516.4	437.9	109.5	847.9
Georgia <u>7/</u>	171.4	241.8	693.7	639.6	83.1	922.1
Hawaii	75.1	82.1*	853.7	903.0*	57.2	1,057.7*
Idaho	124.1	90.3	1,312.7	1,274.9	77.0	971.2
Illinois <u>8/</u>	226.6	197.5	1,062.2	1,089.9	112.0	1,026.1
Indiana	91.8	196.5	448.8	443.3	75.3	987.7
Iowa	199.1	52.8	3,450.5	3,543.8	77.6	1,027.1
Kansas	146.8	92.5	1,462.2	1,553.3	53.9	1,049.3
Kentucky	194.7	123.1	1,467.2	1,467.9	133.6	987.0
Louisiana	191.7	139.3	1,303.1	1,335.4	59.1	1,024.8
Maine <u>9/</u>	208.5	289.4	716.9	606.0	122.3	845.2
Maryland <u>10/</u>	334.9	215.8	1,508.9	1,400.0	114.9	927.8
Massachusetts	258.7	279.6	905.1	854.8	110.2	922.4
Michigan	115.6	175.4	629.7	649.9	55.9	103.2
Minnesota <u>11/</u>	163.4*	116.6	1,269.4*	1,372.3	80.9	1,081.1*
Mississippi	161.4	221.0	617.9	754.9	69.6	922.9
Missouri	211.2	163.3	1,169.7	1,259.3	94.7	1,076.6
Montana	233.7	200.9	1,150.8	1,075.9	101.2	933.3
Nebraska	138.8	144.8	826.6	1,021.7	84.8	1,236.0
Nevada	211.9	101.8	1,982.9	2,002.1	53.4	1,009.7
New Hampshire	259.4	309.2	818.9	755.9	94.0	923.1
New Jersey	195.2	239.3	782.3	723.6	128.5	924.9
New Mexico	151.6	64.7	2,357.3	2,244.9	95.2	952.3
New York <u>12/</u>	245.1	437.1	550.8	459.6	120.8	834.3
North Carolina	282.7	164.6	1,665.0	1,594.1	121.9	957.4
North Dakota	223.9	197.4	1,101.6	1,104.0	64.0	1,002.2
Ohio <u>13/</u>	194.6	197.5	979.8	894.2	88.7	912.6
Oklahoma	234.9	155.0	1,484.0	1,458.7	64.5	982.9
Oregon	233.2	110.7	2,006.5	1,990.9	96.4	992.2
Pennsylvania <u>14/</u>	77.2	263.3	281.6	279.5	77.6	992.5
Rhode Island <u>15/</u>	450.6	220.7	2,009.6	2,027.4	8.1	1,008.8
South Carolina	154.1	225.7	667.6	598.0	105.0	895.7
South Dakota	214.3	206.1	1,008.6	990.0	96.0	981.5
Tennessee <u>16/</u>	245.8	177.2	1,376.8	1,290.8	92.5	937.5
Texas <u>17/</u>	139.3	132.1	1,019.5	986.7	87.5	967.8
Utah	104.6	52.7	2,022.7	1,905.5	66.2	942.1
Vermont <u>18/</u>	194.3	255.7	743.2	631.1	146.6	849.3
Virginia <u>19/</u>	173.1	257.7	669.7	581.8	108.8	868.7
Washington	118.8	91.4	1,234.1	1,248.9	69.0	1,011.9
West Virginia	187.5	254.5	800.8	679.0	90.8	944.0
Wisconsin	212.7	277.8	729.0	738.2	81.4	1,012.6
Wyoming	172.3	163.1	1,073.4	1,002.0	49.6	933.5

Refer to page 7 for footnotes

- 1/ Excludes Idaho, Minnesota and New York.
- 2/ Excludes Idaho and New York.
- 3/ Alabama: Data cover fiscal year ending September 30, 1968. Data for admission categories for Searcy Hospital are unavailable. Estimates shown are based on 1967 data.
- 4/ California: Personnel data includes filled positions authorized for care of mentally ill and mentally retarded patients at De Witt and Patton State Hospitals.
- 5/ Connecticut: Data for admissions with prior admission to hospitals in same State system and all other admissions are unavailable. Estimates shown are based on 1967 data.
- 6/ District of Columbia: The increase in admissions for 1968 is due to the closing of the D. C. General Hospital Acute Psychiatric Department. All of these emergency cases were admitted to St. Elizabeths. Since a substantial proportion of the patients at St. Elizabeths Hospital are nonresidents of the District of Columbia, the increase in admissions is not representative of the District of Columbia. District computed only for residents of the District of Columbia. District residents include \$,010 total admissions and 4,687 resident patients at the end of the year.
- 7/ Georgia: Data for maintenance expenditures for the Georgia Mental Health Institute includes cost for care of outpatients as well as inpatients, therefore, this is an overestimate.
- 8/ Illinois: Data for resident patients exclude patients who were on "Home Visits". Maintenance expenditure data include the cost for outpatients, therefore, this is an overestimate.
- 9/ Maine: Pineland Hospital and Training Center is a dual purpose institution. Only data pertaining to the mentally ill are reported here.
- 10/ Maryland: Data collected for only the classifications "First Admissions" and "Readmissions".
- 11/ Massachusetts: Data for resident patients at beginning and end of year include six mentally ill patients receiving tuberculosis treatment at Glen Lake State Sanatorium.
- 12/ New York: Data cover fiscal year ending March 31, 1968. Data for maintenance expenditures are available for the following facilities: Matewan State Hospital and Dannemora State Hospital. Therefore, the maintenance expenditure ratios for New York exclude 1,481 patients under treatment and 998 average daily patients in these two facilities.
- 13/ Ohio: Includes data for mentally ill patients at the following dual purpose institutions: Apple Creek State Hospital, Cambridge State Hospital and Springview Hospital. Does not include personnel and maintenance expenditure data for Apple Creek State Hospital and, therefore, the maintenance expenditure ratios for Ohio are based on the facility. (Twenty-six patients under treatment and 23 average daily patients were reported). At Cambridge and Springview, although data pertain only to the mentally ill, personnel and maintenance data pertain to all patients.
- 14/ Pennsylvania: Western State School and Hospital is a dual purpose institution. Only data pertaining to the mentally ill patients are available. Therefore, the maintenance expenditure ratios for Pennsylvania exclude 43 patients under treatment and 36 average daily patients.
- 15/ Rhode Island: Data for the admission categories for the Charles V. Chapin Hospital are unavailable, therefore, all admissions for this hospital are included in "all other admissions".
- 16/ Tennessee: Data for resident patients, admissions, deaths and average daily include partial hospitalization of night care patients. The count of admissions includes 644 admissions who became inpatients during the year, having been outpatients or in day care previously in the same hospital.
- 17/ Texas: Data cover fiscal year ending August 31, 1968. Data does not include the inpatient unit at the Rio Grande State Center which opened in April 1968.
- 18/ Virginia: Maintenance expenditure data for Northern Virginia Mental Health Institute and De Jarnette State Sanatorium are unavailable. Therefore, the maintenance expenditure ratios for Virginia exclude 367 average daily patients, 650 patients under treatment and \$,381,672 maintenance expenditures in these three facilities.
- 19/ Per resident patient maintenance expenditures are based on the average daily resident patient population of hospitals reporting expenditures.
- 20/ Per patient under treatment maintenance expenditures are based on the patients under treatment (resident patients beginning of year plus total admissions) for hospitals reporting expenditures.
- 21/ Admission and resident patient rates are per 100,000 estimated civilian population. Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 405, provisional estimate for 1968.
- 22/ Average resident patient rates are based on the average of the beginning and end of year resident patient population.

Symbols used: \* indicates data which are estimates or include estimates.

--- Data not available.

### III. DESCRIPTION AND LIMITATIONS OF THE DATA

#### A. Patient Movement Data

The summary data presented in this report may be used to analyze the annual changes in year end populations of the state and county mental hospitals in terms of three categories of patient movement (admissions, net releases and deaths). These categories are defined as follows:

##### 1. Admissions: This category includes three admission classifications. Admissions With No Prior Psychiatric

Inpatient Experience includes patients admitted to hospitals with no record of prior admission to any inpatient psychiatric facility either within or outside the state system. The state system is defined to include state and county mental hospitals and public institutions for the mentally retarded. This category replaces the former classification, first admissions, which was defined as "a patient who has not previously been admitted to a public or nonpublic hospital authorized for the treatment of mental disorders." The major difference between these two definitions lies in the area of psychiatric services in general hospitals. In using the first admission definition, some states did not consider prior psychiatric treatment in a general hospital as constituting a previous psychiatric admission. Under the present definition such cases are considered as having a prior admission to an inpatient psychiatric facility. Therefore, the number of admissions with no prior inpatient psychiatric experience will either be less than or equal to the number of first admissions (old definition). Admissions With Prior Admission to Hospitals in Same State System are patients admitted to the hospital with a history of prior admission to a public mental hospital or a public institution for mentally retarded in the same state. All Other Admissions include patients admitted to the hospital with prior admission to other inpatient psychiatric facilities--state psychiatric facilities in other states, Veterans Administration hospitals, private mental hospitals, private institutions for the mentally retarded, and any other inpatient psychiatric facilities (including psychiatric services in general hospitals) which are medical facilities accepting patients for screening and/or treatment of psychiatric disorders.

2. Net Releases Alive from Hospital The concept of "net release alive from hospital" takes into account movement of patients into and out of the hospital since this quantity is the number of placements on extramural care plus direct discharges from the hospital less the number of returns from extramural care, all occurring during any one year. National data on placements and returns from extramural care are not available but net releases may be computed from less detailed movement data as:

$$\left[ \begin{array}{c} \text{Net} \\ \text{Releases} \\ \text{Alive from} \\ \text{Hospital} \end{array} \right] = \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{Beginning} \\ \text{of Year} \end{array} \right] + \left[ \begin{array}{c} \text{All Admis-} \\ \text{sions} \\ \text{excluding} \\ \text{Transfers} \end{array} \right] - \left[ \begin{array}{c} \text{Deaths} \\ \text{in} \\ \text{Hospital} \end{array} \right] - \left[ \begin{array}{c} \text{Resident} \\ \text{Patients} \\ \text{End of} \\ \text{Year} \end{array} \right]$$

Interpretation of net releases alive from hospital should be made with caution. This quantity is the net number of releases alive from the state hospital system and includes not only direct discharges to the community and placement on leave but also direct discharges to other inpatient facilities outside the state system such as Veterans Administration hospitals, nursing homes, boarding care homes, and mental hospitals in other states. The number of net releases is used as a measure of movement out of the hospital rather than the total number of discharges because many discharges occur while patients are already outside the hospital on extramural care. The number of net releases may be considered an estimate of the number of effective releases from the hospital under the assumption that subtracting returns from leave during the year removes only the short term visits, leaves, and escapes and retains the effective releases; i.e., those from which the patients did not return to the hospital within the time period covered.

3. Deaths in Hospital This category includes only deaths occurring to patients resident in the hospital and does not include deaths among patients on leave even though these patients are still on the hospital books.

4. Patient Movement Ratios per 100,000 Civilian Population The admission ratio measures the proportion of people coming under care during the year while the average daily resident patient ratio measures the average proportion of the population under care at any one time during the year.



5. Patient Movement Ratios per 1,000 Average Resident Patients These ratios relate the average resident population to three movement categories: Total admissions, Net releases and Deaths, thus providing indexes of the amount and type of patient movement activity that occurred during the year. It should be kept in mind that the ratios shown in this publication are based on totals and as such they have the limitations of totals since they are not standardized for such important variables as age, sex, diagnosis, and years of hospitalization. To illustrate how these ratios are descriptive of changes in resident patient populations, consider the following hypothetical example: Suppose that the resident patient populations in State A and State B each decreased by 0.6 percent (or 6 per 1,000). Considering only these data gives a limited and potentially misleading view of patient movement activity. However, now suppose that the patient movement ratios are computed to be the following:

<u>Movement Category</u>	<u>State A</u>	<u>State B</u>
Admissions	323.7	522.2
Net Releases	229.5	454.8
Deaths	99.9	73.5

These ratios show that State B has much higher rates of patient movement into and out of the hospital than State A. While these ratios highlight areas of difference between the two states, conclusions based only on these ratios may be fallacious. The differences can be isolated further by analyzing the data in terms of the patient characteristics mentioned above (age, sex, diagnosis, and years of hospitalization). Even at this point, one cannot evaluate the relative efficacy of the two state mental hospital programs since differences in patient movement ratios between states may also be attributable to a great many other factors, such as policies and laws controlling admissions and release, the ways in which the mental hospitals are utilized by the communities they serve, the types of patients admitted, the various treatment programs within the hospitals, and the availability of various community facilities that can serve as adjuncts or alternatives to hospitalization. Since the reasons for interstate differences in these movement ratios are complex and vary considerably from hospital to hospital within and between

states, ratios constructed from gross movement data (i.e. state totals) can not be used to measure the therapeutic effectiveness of various hospital programs.

6. Ratio of Net Releases to 1,000 Admissions The ratio "net releases per 1,000 admissions" is a convenient index for summarizing the live net movement into and out of the hospital. For example, if the ratio is less than 100, there were more admissions than net releases. Note that this index does not relate net releases to admissions in the sense of a percent or rate because not all releases during a year derive from the admissions during that year. Some of these net releases occurred to patients with lengths of stay greater than one year, that is, patients admitted during some prior year.

#### B. Expenditure Ratios

The expenditure per average daily resident patient has been the most commonly used ratio for comparing mental hospital expenditures. Its major limitation is that it does not adequately take into account the number of admissions for which a large share of the expenditure is required. If the patient base is enlarged to include admissions during the year the resulting sum is the best available estimate of patients under treatment during the year. This quantity is actually defined as:

$$\left[ \begin{array}{c} \text{Patients} \\ \text{Under} \\ \text{Treatment} \end{array} \right] = \left[ \begin{array}{c} \text{Resident} \\ \text{Patient} \\ \text{Beginning} \\ \text{of Year} \end{array} \right] + \left[ \begin{array}{c} \text{All Admis-} \\ \text{sions} \\ \text{excluding} \\ \text{Transfers} \end{array} \right] + \left[ \begin{array}{c} \text{Returns from Leave} \\ \text{among Patients on} \\ \text{Leave Beginning} \\ \text{of Year} \end{array} \right]$$

The estimate, however, does not include the last category, Returns from Leave, since these data are not available nationally.

The ratio of expenditures to patients under treatment appears to be a more realistic measure, but it does not solve the problem completely. While a larger share of the expenditures is required for the care of admissions, the index weights both admissions and resident patients equally.

The expenditure figures and ratios are not necessarily expenditures by state agencies alone inasmuch as county expenditures for the care of patients in the mental hospitals are included for Maryland, Michigan, New Jersey, Tennessee and Wisconsin, the only states with county mental hospitals. County data have been included to insure

greater comparability among states in expenditures per patient.

### C. Interstate Variation

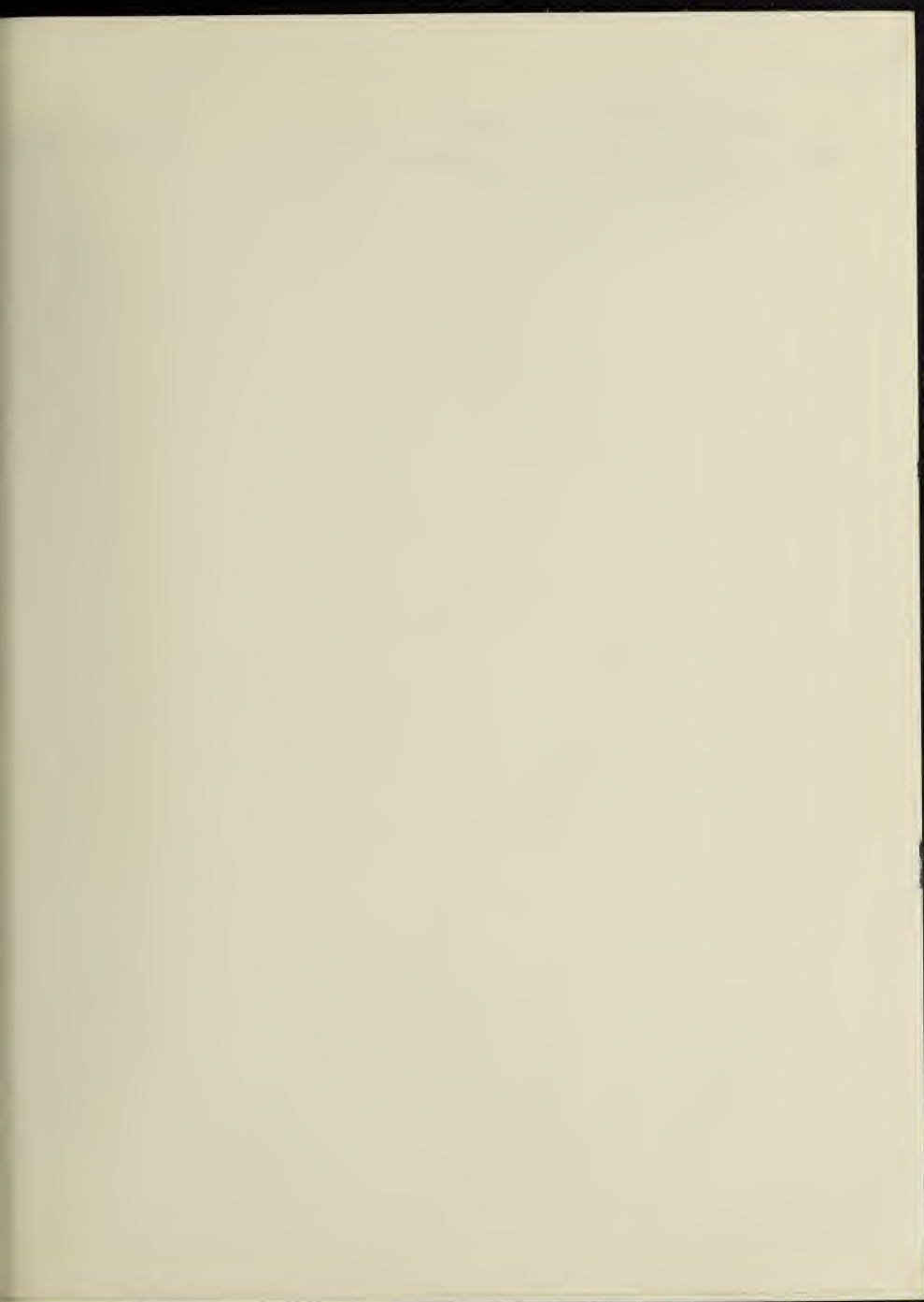
Considerable variation among states in patient movement, personnel, and expenditure data is indicated in Table 2.

Actual numbers are not comparable among states since they do not take into account differences in size of population. Therefore, ratios have been computed for several data categories.

For example, net releases and total admissions per 1,000 average resident patients show considerable variation, with net release rates ranging from 280 to 3,544. Rates of admission and resident patients end of year per 100,000 civilian population also vary considerably for State to State. In addition, a high of \$12.02 per patient under

treatment per day to a low of \$2.65 further points out the considerable variation existing among states.

However, as has been emphasized in Sections A4-A6, comparison of state ratios, while serving to highlight areas of differences, are limited. More detailed classifications of movement categories by such variables as age, sex, diagnosis and time on books are needed. Data on age, sex, and diagnosis as well as more detail on personnel and maintenance expenditures will be available in the near future. This detail will provide partial explanations of the gross differences noted in the above tables. Also, as mentioned previously, other factors such as policies and laws affecting admission and release of patients, other community treatment facilities, effectiveness of therapeutic programs, etc., must be evaluated to determine the extent of their influence on interstate variation.

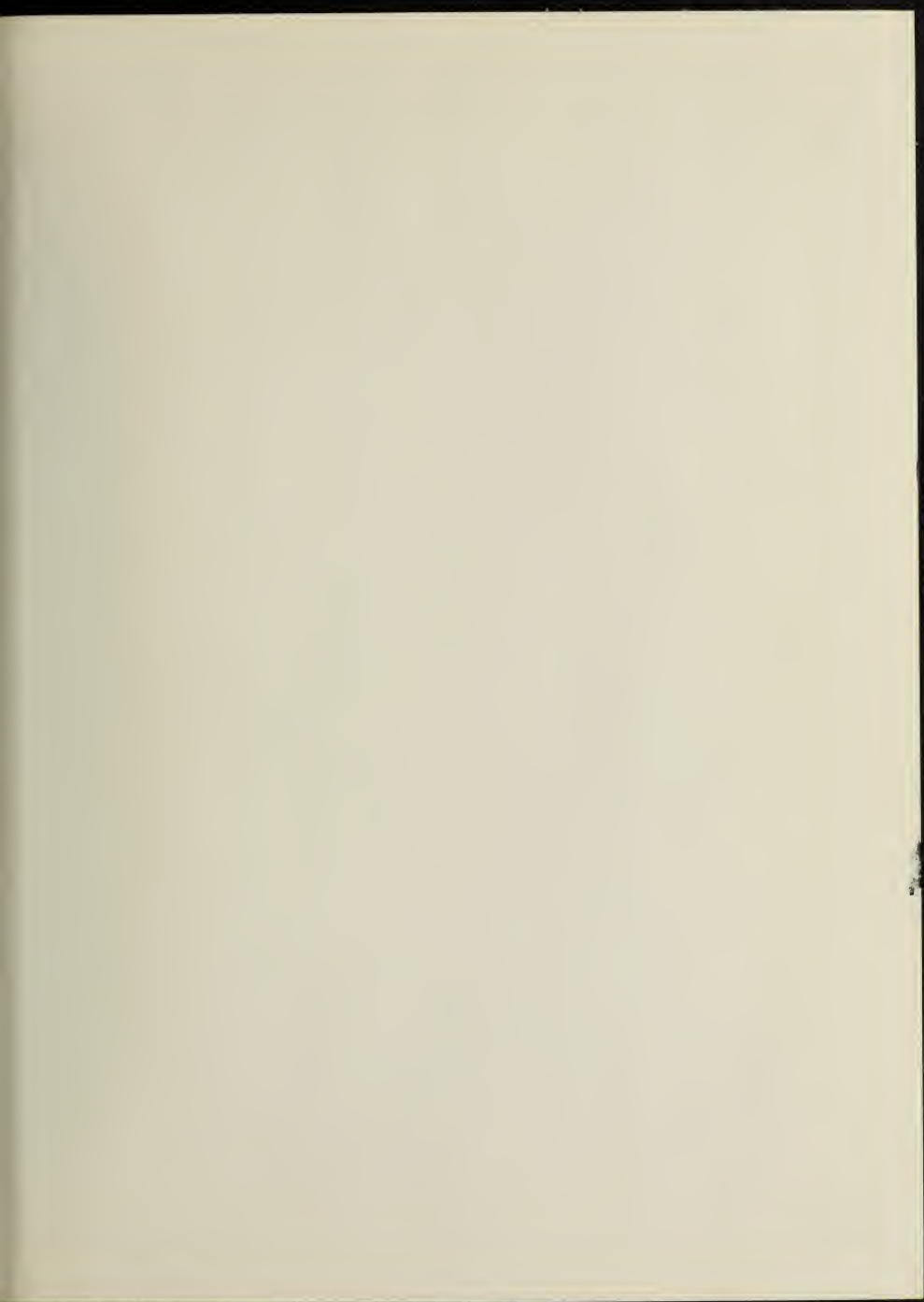


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